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## UNITED STATES CAVALRY ASSOCIATION.

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### FORT PIERRE AND ITS NEIGHBORS.

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OLD FORT PIERRE, which for more than half a century was one of the most conspicuous landmarks on the upper Missouri, and whose name is perpetuated in the capital of a sovereign State, possesses more than a passing interest to the army, with whose history it is indissolubly associated. While it owed its establishment to the pursuit of the fur trade, which in the early years of the present century engrossed the attention of the idle capital of the commercial world, while affording employment for the superfluous energy of those adventurous spirits who, through all history, have followed close upon the trail of the discoverer, it came early under the eye of the army, without whose protection it could not have existed a month. It was one of a series of historical guide posts, which, dotted here and there across the Western Hemisphere, indicate the course of empire. The credulous nature of the unsuspecting native who, for a string of glittering beads, was willing to exchange a pelt or skin, an ivory tusk or a bundle of feathers worth

a thousand times their value, has furnished the incentive through which more than one continent has been opened up to civilization.

An army legend asserts that the place was founded by the illustrious PETER THE HERMIT, who miraculously survived the first Crusade, and selected this point near the *mauvais terre*, because of its unmitigated dreariness and its indescribable desolation; but as this is not well authenticated we give it for what it is worth. In the same manner we are compelled to discredit the intimation expressed in the well known sonnet that was sung about the camp-fires of the Sioux expedition of 1855:

"Oh we don't mind the marching, nor the fighting do we fear,  
But we'll never forgive old HARNEY for bringing us to Pierre,  
They say old SHOTTO built it, but we know it is not so;  
For the man who built this bloody ranche is reigning down below."

But all this is legendary, if not absurd, and we mention it merely as a part of the history that attaches to a famous locality. We shall discover facts enough before we are through.

As the first link then, in the chain of events that lead up to the door of a State capital, we find living in New Orleans about the middle of the last century, under the governorship of the Marquis de VAUDREUIL-CAVAGNAL, one, MARIE THÉRESE BOURGEOIS, born in that city in 1733, who at the age of sixteen had married one, AUGUSTE RÉNE CHOUTEAU, also a native of New Orleans, and finding him of an uncertain temper, abusive and violent of conduct, had left him and returned to her friends, taking their only child, AUGUSTE, who had been born on the 26th of September, 1750. Upon the subsequent whereabouts or ultimate fate of M. CHOUTEAU, pere, history is silent. In providing the name for a family that was to become famous in the annals of the New World, he seems to have fulfilled his destiny. Five years later there appeared at New Orleans one PIERRE LACLEDE LIGUEST (there is doubt concerning the last of these names, and as it was seldom used, the point is unimportant), a native of Bearne, not far from Pau in the Pyrennes; an attractive and energetic fellow of thirty or thereabouts, who had journeyed to the Mississippi in search of the proverbial fortune. He seems to have found it almost immediately, in the person of Mme. CHOUTEAU—still young and unencumbered save by the youth AUGUSTE, with whom he established domestic relations, and in the friendship of M. DE KERLEREC, who had succeeded to the governorship upon the promotion of the Marquis de VAUDREUIL to the Governor-Generalship of Canada, through whom he was enabled to secure a valuable contract to feed the French garrisons. In the

pursuit of this vocation he encountered one, GILBERT AUGUSTE MAXENT, another soldier of fortune, who was equally energetic and similarly ambitious, and who was also most influential at the vice-regal palace. In 1763, just before LOUIS XV., in a moment of bibulous generosity had ceded the Louisiana Territory to Spain, DE KERLEREC was recalled and sent to the Bastille for safe keeping, but not before having made over to Messieurs MAXENT and LACLEDE the most valuable grant in his gift, an exclusive privilege to trade with the Indians on the upper Mississippi and its tributaries. "Thus does the fate of empire on a trifle rest."

These enterprising gentlemen seem to have lost no time in taking possession. They left New Orleans on the 3d of August, 1763, with a party of trappers, hunters and tradesmen, about thirty in number, for the purpose of locating the first of their proposed chain of trading posts, taking with them Mme. CHOUTEAU and her son AUGUSTE, together with the four children who had been the result of her second union. The party landed at Fort Chartres on the 3d of November, where they spent the winter, but early in February, 1764, young CHOUTEAU, then a robust youth of fourteen, was sent with a party of workmen to a spot on the west bank which LACLEDE had selected, to clear the ground and erect habitations. Here they were joined during the spring by another small party from New Orleans, and later by discharged soldiers and others from Fort Chartres.

As regards the naming of the new settlement there is much dispute. A favorite legend fixes the date of the completion of the village at the 25th of August, which being the fete day of SAINT LOUIS, suggested the name. It is a fact, however, that for many years, after the custom of the fatherland, the 25th day of August was observed at St. Louis as the fete day of the settlement. From this date the firm of MAXENT, LACLEDE & Co., the owners of the village and all its suburbs, as well as the sole purveyors of trade for all the country to the westward, seems to have flourished. AUGUSTE CHOUTEAU, whose business abilities developed with the trade, became the confidential clerk and agent of the Company, its chief clerk, and finally its manager; so that when in 1778 old PIERRE LACLEDE died, young CHOUTEAU was selected by the governor to administer the estate. So well did he perform this duty that Mr. MAXENT, who appears to have been at the best an inactive member of the firm, found it practicable to withdraw from the business, and AUGUSTE, associating his younger brother, JOHN PIERRE, who by this time had reached his majority, picked up the trade where LACLEDE had

dropped it, and for the succeeding quarter of a century proceeded to amass a respectable fortune.

In the meantime, VICTORIE, the eldest daughter of the CHOUTEAU-LACLEDE union, had married CHARLES GRATIOT; PALAGIE, the second, had espoused SYLVESTER LABBADIE; and MARIE LOUISE, the third, JOSEPH M. PAPIN, all gentlemen of wealth and standing, and all interested in the Indian trade. JOHN PIERRE had established intimate relations with the Osages and other tribes to the westward, and was regarded by JEFFERSON and MADISON, no less than by MERRIWETHER, LEWIS and WILLIAM CLARK, as possessing the best knowledge of the Indian character of any man living, and by each of these officials was intrusted with many confidential missions. A son of JOHN PIERRE, by name AUGUSTE PIERRE, penetrated to the headwaters of the Arkansas, and died at his trading-post in 1839; another son, FRANCIS GRATIOT, ascended the Missouri and founded Kansas City at the mouth of the Kaw. But this is to anticipate.

It was not to be expected that so promising a field should be long monopolized by a single firm. The license given LACLEDE by the French administration was never seriously recognized by the Spanish succession, though some feeble attempts were made to protect it, and when in 1800 Spain, tired of her unruly colony, returned it to the giver, the transfer was merely nominal, and the most of the inhabitants whose nationality was thus summarily tossed about, never heard of it, nor would have been at all concerned if they had. St. Louis as the head of the Indian trade soon became the rendezvous of daring spirits of all nations, who saw in the impending contest between England and France for the control of a continent a probable opportunity for the exercise of their peculiar talents. It was while the decision of this absorbing question was hovering in the balance that the sagacious mind of NAPOLEON found a happy though unexpected solution in the sale of the whole country, present and remote to the United States; and this was the signal for deeds of enterprise and daring such as were to surprise the world.

#### THE FUR TRADE ON THE MISSOURI.

In 1802 one, MANUEL LISA, a wealthy and enterprising Spaniard, formed at St. Louis a partnership with FRANCIS BENOIT, GREGORY SARPY and CHARLES SANGUINET, under the name of LISA, BENOIT & Co., for the purpose of operating an Indian trade along the upper Missouri in opposition to the CHOUTEAUS, but nothing seems to have come of it beyond a dispute among the partners, which the courts

were called upon to settle. In 1806, however, encouraged by the favorable reports of LEWIS and CLARKE, two army officers who had spent the winter of 1804-5 at the Mandan villages, not far from the present site of Bismarck and had penetrated to the Rocky Mountains, LISA formed another partnership with GEORGE DRUILLARD, one of LEWIS and CLARKE's men, with a capital of \$16,000, and entered upon active operations. These gentlemen ascended the Missouri during the fall of 1807 and spent the winter at the mouth of the Yellowstone and Big Horn. Their establishment, to which they gave the name of Fort Manuel, was the first in that section. LISA returned to St. Louis in 1808, and together with General WILLIAM CLARKE, the famous pioneer, and SYLVESTER LABBADIE the son-in-law of Madame CHOUTEAU, each contributing \$9,000, organized the American Fur Co. In the spring of 1809 these three gentlemen, at the head of a party of 150 men, ascended the Missouri as far as Fort Manuel, leaving a small establishment at the Arickaras village not far below the mouth of Big Knife River, which they called Fort Clarke; a second at the Mandan village, a mile or two above; and a third at the village of the Gros Ventres on the right bank. In the spring of 1810 they proceeded to the Three Forks of the Missouri, where they erected a fort and commenced trapping for beaver. They had every prospect of success until their operations were interrupted by the hostility of the Blackfeet, and after having lost some thirty of their men, became dispirited and began to separate, some returning by way of the Missouri, and others entering the employ of the Hudson Bay Co. The company languished during the second war with Great Britain, and finally expired about 1816.

About this time, GABRIEL CERRÉ and FRANCIS GRATIOT CHOUTEAU commenced to trade with the Kansas Nation, locating their house at a point very near the mouth of the Kansas (or Kaw), and BERNARD PRATTE, Jr., a grandson of Madame CHOUTEAU, and JOSEPH and ANTOINE VASQUEZ built a trading station at the Maha (or O-maha) village, somewhere about the mouth of the Platte. In 1818 the United States factory at Fire Prairie (Fort Osage) was abandoned, leaving the trade of the Osages to CHARLES LÉGUERRIER and the CHOUTEAU BROTHERS, who had contested it for twenty years. These, with the trading houses of JOHN and FRANCOIS ROBERDEAU and JOHN M. PAPIN, another son-in-law of Madame CHOUTEAU, enjoyed a monopoly of the trade of the Ottos, the Ioways and the Missourias, while the firm of BERTHOLD & CHOUTEAU took that of the Pawnees, the O-mahas, the Piankeshaws, the Arickarees, and such of the Sioux as could be reached.

Such was the condition of the trade along the Missouri when, in 1819, nine gentlemen of St. Louis formed a partnership under the name of the Missouri Fur Co., having for its object the purchase of the interest of the company of the same name that had failed in 1816. These were MANUEL LISA, who was selected its president; THOMAS HEMPSTEAD, Jr., a brother-in-law of LISA; JOSHUA PILCHER, who afterwards became Superintendent of Indians at St. Louis; JOSEPH PERKINS, ANDREW WOODS, MOSES B. CARSON, JOHN B. ZENOIN, ANDREW DRIPPS and ROBERT JONES. During that summer PILCHER, who was well acquainted with the country, with a well appointed party, ascended the Missouri until they had outdistanced all the trading-houses on the river. Then, at what is now known as the Second Cedar Island, they built their first post, which they called Fort aux Cedars; at a point on the left bank, opposite Prospect Island, they located a second, under the name of Fort Lookout; and at about an equal distance above the Great Bend, also on the left bank, they left a third, which later became known as Fort George. At the Great Bend itself they erected a blacksmith shop for the manufacture of axes, battle axes, hatchets, knives, lances, etc., for the Indian trade, and twenty miles further along the river, at a point on the right bank, opposite the mouth of the Teton, they built a small establishment surrounded by a stockade, to which they gave the name of Fort Tecumseh. This was very near the site of the present city of Pierre, South Dakota.

The history of the following ten years, which was one of comparative quiet on the Missouri, takes us for a moment into the unexplored regions to the west and northwest. In 1809-10 JOHN JACOB ASTOR had organized his American Fur Company (the titles of these corporations become confusing) under a charter from the State of New York, with a capital of \$1,000,000—an immense sum in those days—and this parent company had begot a numerous offspring, most of them fledglings, organized, perhaps, as in these later years, rather for speculative purposes than legitimate operations. Among these were the Pacific Fur Company, created in 1810, with headquarters at the new city of Astoria, at the mouth of the Columbia; the Southwest Company, in 1811, intended to operate as far south as the Platte; the Columbia Fur Company, in 1817, to cover the territory between the Mississippi and the Yellowstone, and the two latter merging in 1826 with the North American Fur Company, which had been created in 1823. All these, it will be observed, confined their operations to the territory north of the 40th parallel. The country to the south of this line, which touched

closely upon the Spanish possessions, was practically a *terra incognita*. In 1826 JEDEDIA SMITH, WILLIAM JACKSON and MILTON SUBLETTE organized a company at St. Louis, under the name of the Rocky Mountain Fur Company, for the purpose of penetrating this southern section, and during the following four or five years explored the whole region from St. Louis to Santa Fe, and from thence to the Pacific, along the ocean to the mouth of the Columbia, and thence up the Columbia and back to the Missouri. But although this series of explorations were among the most remarkable achievements of American history, and although the company mustered at one time more than four hundred employees, and had projected enterprises that were rather gigantic than practicable, there came a time when it found itself unable to realize on its expectations, and after an existence of scarcely eight years, the Rocky Mountain Company decided to retire from business.

In the meantime the CHOUTEAUS, including the various branches of the family, had been busily accumulating fortunes. BERNARD PRATTE, who had married the daughter of SYLVESTER LABBADIE and PELAGIE CHOUTEAU, JOHN P. CABANNE, a banker of St. Louis, and BARTHOLEMEW BERTHOLD, who had married the only daughter of JOHN PIERRE, Sr., had joined with PIERRE, Jr., to form the American Fur Company of St. Louis. Then AUGUSTE and PIERRE, Sr., had retired, and been succeeded by PIERRE, Jr., much the ablest and energetic of the family, and the latter, with his partners of the American Fur Company, had, in 1834, purchased all the western interests of ASTOR, thus swallowing the progeny of its eastern patronymic, and becoming so formidable a competitor to the Hudson Bay Company as to compel it to confine its operations to British territory. So that when the stock of the Rocky Mountain Company came into the market, it was PIERRE CHOUTEAU, Jr., as the head of the CHOUTEAU syndicate, who grasped it, and by this operation succeeded in controlling nearly all the fur business of the United States east of the Rockies, as well as the trade with Santa Fe.

#### FORT PIERRE CHOUTEAU.

In purchasing the ASTOR interests, CHOUTEAU had secured the services of the men who had been managing those interests, and who, in many instances, had opened up and developed them. Among these was one, KENNETH MCKENZIE, a native of Scotland, who had served the Hudson's Bay Co., from which he had retired in 1820 and located himself as an independent trader on the upper Missouri,



becoming friendly with the Indians, and held by them in great respect. In 1829 he had gone with the North American Co., and when this was purchased by CHOUTEAU, he had entered the service of the latter and was put in charge of all his trade on the upper Missouri, with headquarters at Fort Tecumseh. The site of this post was not a convenient one for the Indians with whom MCKENZIE desired to trade; the river was wide at this point, and crossing difficult; for three and four days at a time the high winds, low waters and quicksands, closed all communication with the other bank. Moreover, experience had determined that the left bank of the Missouri was the preferable one for Indian trading. On this side roamed the Teton, the Ogallalas and Arickares, much the larger and friendlier tribes, while on the north bank the Yanktons, Yanktonies and Siouones were few in numbers, and to reach them it was necessary to go as far as the Jacques, frequently to the St. Peters. In company with WILLIAM LAIDLAW, another employee of the Chouteau Co., MCKENZIE visited the head village of the Arickares and obtained their consent to the location of a trading post on the left bank. The site selected was a level plateau some three hundred feet back from the river, about three miles from the mouth of the Wapka Shicka (variously styled the Teton, the Bad and the Little Missouri) and there in the spring of 1832, they erected a stockade 280 by 300 feet square, to which they gave the name of Fort Pierre Chouteau.

The new establishment having been completed, all portable property was removed from Fort Tecumseh and that post abandoned. The letter book, in which was recorded all the transactions of the establishment, shows the last communication from Fort Tecumseh to have been dated May 10, 1832, and signed by KENNETH MCKENZIE; the next is dated at Fort Pierre June 17, 1832, and signed by WILLIAM LAIDLAW, which is approximately the date of the opening of business at Fort Pierre.

It was about this time that the post was visited by GEORGE CATLIN, the famous Indian painter, whose portraits of the more prominent chiefs of the various tribes of North American Indians adorn the National Museum at Washington. CATLIN dates his letters from the mouth of the Teton, which point he had reached after descending the Missouri from the mouth of the Yellowstone, in company with BATISTE and BOGARD, his *compagnons du voyage*. "I am living with and enjoying the hospitality of a gentleman by the name of LAIDLAW," he writes (this is in May or June, 1832), "a Scotchman, who is attached to the American Fur Company, and who, in com-



pany with Mr. McKENZIE (of whom I have before spoken) and LAMONT, has the whole agency of the Fur Company's transactions in the regions of the upper Missouri and the Rocky Mountains.

"This gentleman has a finely built fort here of two or three hundred feet square, enclosing eight or ten of their factories, houses and stores, in the midst of which he occupies spacious and comfortable apartments, which are well supplied with the comforts and luxuries of life, and neatly and respectably conducted by a fine-looking, modest and dignified Sioux woman, the kind and affectionate mother of his little flock of pretty and interesting children.

"This fort is undoubtedly one of the most important and productive of the American Fur Company's posts, being in the center of the great Sioux country, drawing from all quarters an immense and almost incredible number of buffalo robes, which are carried to the New York and other Eastern markets and sold at a great profit. This post is thirteen hundred miles above St. Louis, on the west bank of the Missouri, on a beautiful plain near the mouth of the Teton River, which empties into the Missouri from the west, and the fort has received the name of Fort Pierre, in compliment to Monsieur PIERRE CHOUTEAU, who is one of the partners in the Fur Company, residing in St. Louis, and to whose politeness I am indebted, as I have before mentioned, for my passage in the Company's steamer on her first voyage to the Yellowstone, and whose urbane and gentlemanly society, I have before said, I had during my passage.

"The country about this fort is almost entirely prairie, producing, along the banks of the river and streams only, slight skirtings of timber. No site could have been selected more pleasing or more advantageous than this; the fort is in the center of one of the Missouri's most beautiful plains, and hemmed in by a series of gracefully undulating, grass-covered hills on all sides, rising like a series of terraces to the summit level of the prairies, some three or four hundred feet in elevation, which then stretches off in an apparently boundless ocean of gracefully swelling waves and fields of green. On my way up the river I made a painting of this lovely spot, taken from the summit of the bluffs, a mile or two distant (Plate 85), showing an encampment of Sioux, of six hundred tents or skin lodges, around the fort, where they had concentrated to make their spring trade, exchanging their furs and peltries for articles and luxuries of civilized manufactures."

CATLIN's view of this scene (which is No. 384 in the Catalogue), taken as he states, from the summit of a bluff a mile or more dis-

tant, necessarily reduces the establishment of Fort Pierre to a mere incident in the background of a wide landscape, the motive of which is an Indian encampment, made up of numberless parallel lines of conical tents of a dingy whiteness, in a frame-work of deep green. The Missouri, like a narrow ribbon of a faint blue tint, winds along the left mid-ground, and is lost behind the opposite bluffs. Mr. CATLIN expresses himself as under deep obligations to McKENZIE, LAIDLAW, and to Mr. HALSEY, the chief clerk of the establishment, and records the fact that during his stay at the fort, which covered a period of several weeks, he had the pleasure of meeting Major SANFORD, the agent of the Sioux, as well as the redoubtable PIERRE CHOUTEAU himself. These gentlemen, on their way to the headwaters of the Missouri, seem to have rested a week or two at Fort Pierre, their presence creating the greatest enthusiasm and pleasure to the Indians, more than 6,000 of whom, according to Mr. CATLIN, were encamped around the fort.

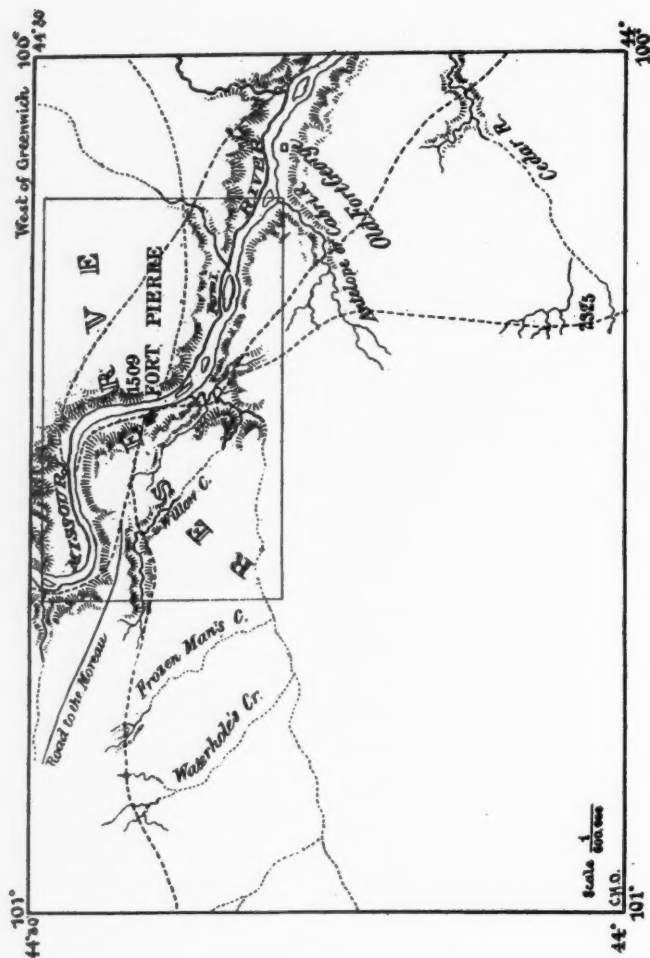
A rough ground plan of the work, supplemented by the painting of Mr. CATLIN, the recollections of Captain LABARGE, still living at St. Louis (1897), who was a steamboat captain on the Missouri, in the employ of PIERRE CHOUTEAU & Co., and who journeyed to the spot in 1855 on the steamboat *St. Mary*, and on behalf of that company delivered over the fort to the United States, and an itemized schedule of the improvements as they were in 1855, enables us to substantially restore the original trading post as it appeared when completed by McKENZIE.

The "fort," so-called, was constructed by enclosing an area of something less than two acres of ground by a picket or stockade of cottonwood logs sixteen to twenty feet in length, set upright in the earth and sufficiently deep to give them a firm hold. On the north-west and southeast corners were block-houses twenty-four feet square, two stories in height, each projecting eight feet outside the stockade, built of logs and covered by a hip roof, shingled. The stockade was entered by two gates ten feet in width and sixteen in height, opening from the east. Within this enclosure, which was 280 feet east and west by 300 feet north and south, were some twenty buildings of various description, and devoted to the various purposes of a frontier trading-post.

Entering the main gate, which stood nearly in the center of the east front, the buildings first encountered were two one-story houses seven and one-half feet in height, of hewed logs, each 60x24, and separated by a ten-foot passage way, which led into the inner enclosure. The building on the right was the carpenter's shop; that

on the left was given over to the blacksmith, the tinner and the saddler. Adjoining these were two long buildings 110x24, and facing them, a third of same dimensions, each of a single story, nine feet in height, built of logs and covered by a shingle roof. The one on the right was the trading-house, or store, where were kept the articles which were given the Indians in exchange for their furs. It was in this building that the bartering went on, and where the courtesies of the company were extended in the form of liquor and tobacco. The other two of the larger buildings were used for quarters for the employees. A building directly in the rear of the westernmost of these, which was also of logs 40x20, was devoted to the kitchens; other smaller log buildings, 24x24, were scattered about the enclosure and used mostly for storing the furs and peltries, awaiting a fitting opportunity to send them down the river to St. Louis. To the right of the blacksmith's shop were the stables; in the rear of the trading-house the saw-mill, and beyond the mill an adobe structure twenty feet square, with tin roof, which was used as a magazine. The place was intended to accommodate from fifty to one hundred men, though few occasions were likely to occur for so great a number. It is improbable that one-half that number were there at any one time for the twenty-five years following its establishment.

The earliest map of this section that was based upon official reconnaissances, was that of NICOLLET (1843), who visited the vicinity in 1839, and was assisted by Lieutenant J. C. FREMONT, of the Topographical Engineers. On this map the trading-post appears as Fort Pierre Chouteau. The next was made by Lieutenant (afterwards Major-General) GOUVENEUR K. WARREN, of the Topographical Engineers, who accompanied General HARNEY on the Sioux expedition of 1855. This map was published in 1859. There are plenty of earlier maps, but none of much value. WARREN's map designates it as Fort Pierre, but all the earlier maps, as well as the one made by the COLTON's, of New York, for WOOLWORTH's Nebraska, in 1857, give the full name. The nature of the elision is unusual, and can be accounted for only on the score of that economy of speech that is peculiar to frontier life. Posts with such designations as Fort John Buford or Fort David A. Russell, have quickly become Fort Buford and Fort Russell, but never Fort John or Fort David. Be that as it may, Fort Pierre for the twenty-five years following its establishment, and in fact for many years afterwards, became the most important landmark in the Sioux country. There is nothing



to be said of its history during this period that may not be said of any frontier trading-post. Its existence was uneventful.

NICOLLET, in his journal, remarks that he arrived at Fort Pierre on the 12th of June, 1839, on the steamboat *Antelope*, owned by the American Fur Co., of St. Louis, which, he says, had been controlled by the several firms of PRATTE, CABANE & Co., PRATTE, CHOUTEAU & Co., and PIERRE CHOUTEAU & Co., having left St. Louis on the 4th of April, so that they were sixty-nine days ascending a distance of 1,271 miles. Among his fellow-travelers were M. WILLIAM LAIDLAW, who was the first manager at Fort Pierre, and was then in charge of the company's establishment at the Yellowstone (Fort Union), and a Mr. KIPP, also an employee of the company, who was stationed at the post on the Maria (Fort Piegan), together with some sixty or seventy employees of the company—Creoles, Canadians and half-breeds, destined for the various posts of the company. At the time of NICOLLET's visit the agents of the factory at Fort Pierre were Mr. P. W. PAPIN and JACOB HALSEY, to whose zeal and interest he is much indebted for the furtherance of his work.

#### THE TRADING POSTS MULTIPLY.

But in the meantime Fort Pierre was being slowly surrounded, and the immense circle of which it was once the center was gradually contracting. The government, which in 1827 had located a large post at a point not far above the mouth of the Kansas under the name of Fort Leavenworth, was rapidly reconnoitering the country, and sending out expeditions in all directions north and west. In 1829 McKENZIE had located a post at the mouth of the Yellowstone, the first on the Missouri within the limits of what is now Montana, to which he gave the name of Fort Union. In 1830, he made a treaty with the Piegans, and with their permission, in 1831 erected a post at the mouth of Maria River which he called Fort Piegan. This location proved a mistake, and he built another in 1832 on the south side of the Missouri at a point called Brule Bottom, and called it Fort Brule. It was during this year that three experienced fur hunters, by name PREMAN, HARVEY and BOISE, formed a partnership for the Indian trade, and established their headquarters at the point on the left bank opposite Medicine Knoll River, where PILCHER had located a post in 1819, and which the Arickarees had robbed the following spring. They gave to their post the name of Fort George. It was a small affair; a few huts, neither stock-

aded nor fortified, and the entire establishment, trading post, business, principals and employees, was almost immediately absorbed by the Chouteau Co., but the name of the post has survived as a prominent landmark to the present day. Another of PILCHER's posts, Fort Lookout, about the same distance below the Big Bend as Fort George was above it, came into the possession of the CHOUTEAUS at about the same time. It was at this post that ATKINSON and O'FALLON had made a treaty with the Tetons, the Yanktons and the Yanktonais on the 22d of June, 1825.

The following year ROBERT CAMPBELL and WILLIAM SUBLETTE built another post five miles below Fort Union, under the name of Fort William, and the same year MCKENZIE erected a large post at the mouth of the Big Horn for the use of the Crows, calling it Fort Van Buren; and this proving an inconvenient point for the Indians he removed it a few miles below, but changed its name to Fort Cass. The next year (1834) the Chouteau Co. went out as far as possible on the Platte and built Fort Laramie, which in 1849 they sold to the United States, and in 1843 ALEXANDER CULBERTSON, one of CHOUTEAU's men who had been superintendent at Fort Brule, and later at Fort Laramie, was sent back to the Piegans, and built Fort Lewis, twenty-five miles above the mouth of the Maria. Three years afterwards this post was abandoned and the timbers of which it was constructed rafted down the river eight miles, where CULBERTSON founded Fort Benton in 1846. About the same time, perhaps a year earlier, the CHOUTEAUS built a post among the Gros Ventres and Mandans, thirty miles below the mouth of the Little Missouri, under the name of Fort Berthold. In 1848, GALPIN and LABARGE both employees of the Chouteau Co., set up for themselves, and built a number of posts along the Missouri and Yellowstone, among them Fort Campbell, a short distance above Fort Benton, but they soon abandoned the trade and returned to the American Fur Co. The same year LAWENDER, another rival trader, built Fort Alexander on the Yellowstone, and in 1850, CULBERTSON went as far as the mouth of the Rosebud and built Fort Sarpy. This was the last of the trading posts. The country was slowly but surely opening up to settlement, and the primitive methods, which had been ample for dealing with the unsuspicious Indian, were inadequate to meet the new conditions.

The settlements were increasing; and to protect the settlers, no less than to keep open the routes of immigration, the aid of the general government was called in, and the instrument of the government for this purpose was naturally the army. As has been mentioned, the United States had in 1827 built a large fort at Leaven-

worth, near the mouth of the Kansas, and in 1849 had purchased from the American Fur Co. its old post on the north fork of the Platte at the mouth of the Laramie. A year earlier it had located Fort Kearney at a point on the Platte midway between those two; it now (1853) built a large post which it called Fort Riley, at the junction of the Republican and Kansas, about midway between Leavenworth and Kearney; and a second on the Minnesota, under the name of Fort Ridgeley. The trail between Fort Ridgeley and Fort Laramie, the two posts furthest advanced, something over 650 miles in length, crossed the Missouri at Fort Pierre, which was nearly equi-distant between them. This was the situation when, in 1855, the repeated and merciless barbarities of the Sioux had reached a point where longer forbearance on the part of the government was not to be thought of.

During the years 1850 to 1854 the Sioux had committed frequent depredations upon the settlers throughout Nebraska and the Dakotas, as well as upon the emigrants passing along the route to Oregon and Utah. On the 19th of August, 1854, Lieutenant GRATTAN, of the Sixth Infantry, was sent by the commanding officer at Fort Laramie with thirty men to arrest an offender. The entire detachment was massacred by the Indians with the exception of one man, who escaped severely wounded, and subsequently died. The circumstances of this affair were at first involved in much obscurity, but investigation proved that the massacre was the result of a deliberately formed plan, prompted by a knowledge of the weakness of the garrison at Fort Laramie, and by the temptation to plunder the public and private stores accumulated at and near that post. The number of the Indians engaged in this affair was between 1,500 and 2,000. For the purpose of chastising these Indians, and to protect from further Indian incursions the frontiers of Nebraska and Kansas, as well as the emigrant routes leading from the Missouri to the West, the War Department determined to enter the Sioux country in force.

The orders of the Secretary of War for this purpose are dated March 22, 1855. They designate Brevet Brigadier-General Wm. S. HARNEY as the commander of a force of about 1,000 men, to conduct the operations about to be undertaken against the Sioux, and direct him to proceed to St. Louis to complete the preparations for the expedition. The troops selected were the light battery of the Fourth Artillery then at Fort Leavenworth; four companies of the Second Dragoons at Fort Riley; two companies of the Second Infantry from Fort Riley and four from Carlisle Barracks; six companies of the Sixth Infantry from Jefferson Barracks, three from Fort Laramie



and one from Fort Kearney. In the preparation of the plan of campaign it was considered that the theatre of operations would be limited on the south by the Platte, on the northeast by the Missouri, and the northwest by the Black Hills, with an area of about 90,000 square miles; that the strength of the hostile Sioux would be about 7,000 warriors, and that a decisive engagement with the whole band was preferable to allowing them to break up into small parties. To accomplish this end, it was determined to establish three depots for the collection of troops and supplies. Fort Kearney, Fort Laramie, and a third at some point on the upper Missouri between the White Earth and Cheyenne, in the vicinity of *Fort Pierre*.

#### THE UNITED STATES BUYS FORT PIERRE.

On the following day the Quartermaster-General directed Major VINTON, the Quartermaster at St. Louis, to "obtain the most reliable information possible as to the suitableness of Fort Pierre Chouteau, at the mouth of Bad River on the upper Missouri, for a depot of supplies." Major VINTON replied on the 30th, enclosing a rough plan of Fort Pierre and of the surrounding country. He reported that he had conversed with Mr. JOHN B. SARPY, the active partner at St. Louis of the firm of P. CHOUTEAU, JR. & Co., and from this conversation he gathered that Fort Pierre is unfitted for a depot of supplies for any considerable force. The fort itself is small, and is located in the *Mauvais terre*, where for hundreds of miles there is no grass that can be made into hay; no good ground for corn and fodder, and no fuel within twenty miles. Although he expresses at considerable length decidedly unfavorable opinion of Fort Pierre as a depot, he is compelled to admit that for the purposes of the contemplated operations *there is no other point on the Missouri more eligible*, and on the 9th of April he forwarded a statement from a Mr. PICOTTE, an old employee of the American Fur Co., much at variance with that of Mr. SARPY. This view of the case seems to have prevailed at the War Department, for on the 14th of April an agreement was entered into between General CHAS. GRATIOT, representing P. CHOUTEAU & Co., and Quartermaster-General JESUP, whereby the former agreed to sell to the United States, for the sum of \$45,000, "the trading establishment on the Missouri River, near the mouth of the Little Missouri River, called and known as 'Fort Pierre,' together with all buildings within and around the pickets of said fort, and all the lumber and other materials in and around it, 'as well as' the island in the vicinity," possession to be given on or before June 1, 1855.



## GENERAL GRATIOT.

The appearance of General GRATIOT in this transaction was somewhat significant. If we are to credit the volume of parol testimony, the opinions of many prominent officers of his period, including General SCOTT, as well as of a Senate Judiciary Committee, General GRATIOT was perhaps the most—shall we say the best—abused man in the history of the army. To the dispassionate student who writes sixty years after the event, his case appears to have been one in which a most worthy and zealous officer became enveloped in the meshes of red tape and fell a victim to his own obstinacy. This is no place to argue the matter; it will suffice to narrate the cold facts.

Missouri had two appointments in the year 1804 to the Military Academy, and such was the influence and power of the commercial interests at that period, that both of these most desirable posts were captured by the house of CHOUTEAU. To AUGUSTE, the son of AUGUSTE, who was the eldest son of Madame CHOUTEAU and PIERRE LACLEDE, was given the one, and to CHARLES, a mere lad of sixteen, the son of CHARLES GRATIOT and VICTORIE, the eldest daughter, the other. Both graduated well in the class of 1806, young CHOUTEAU going to the Second Infantry, and thence to the staff of General WILKINSON, and GRATIOT taking his eighteen years of manhood to the Engineers. Promotion was rapid; he was a captain at twenty, a major at twenty-seven, a lieutenant-colonel at thirty-one, and before he was forty he was at the head of his corps, with the rank of Colonel and Chief Engineer of the armies of the United States. In the meantime he had seen hard service in the field under HARRISON in the War of 1812-15; had built and helped to build Forts Delaware and Mifflin, Forts Monroe and Calhoun, as well as the defenses of the Lakes, one of which had been named in his honor. No officer stood higher in the estimation of the army and of his countrymen; none deserved better of the republic.

Like every officer who handles public money (and General GRATIOT up to 1835 had handled from ten to twenty millions) he was in interminable correspondence with the Auditor; letters of advice concerning allowances and disallowances; statements of differences, demanding explanations of this, of that, and the other. What officer of the army is there who has not been through it all? GRATIOT claimed that his accounts had not been settled for twenty years; that he never knew and was never told, whether he owed the government or the government owed him, until the 19th of July, 1838, when he was directed by the Auditor to transfer some \$35,000

from one account to another. At this time his pay had been stopped for some months in consequence of disallowances and suspensions; he had been urging, begging and pleading for a settlement; all to no effect. A happy thought strikes him: he will hold on to the small balance in his hands until the government condescends to balance his accounts; that done, both parties can start all over again. He is amazed that the brilliancy of this idea does not strike the Secretary of War with equal force. On the contrary, the Secretary of War submits the matter to the President, who, on the 28th of November, 1838, decides that General GRATIOT is wrong in his position that an officer may retain public moneys to satisfy alleged claims against the government, and directs that he pay over at once to the treasury the sum of \$21,654, and \$10,058 more within thirty days. Alas for the perversity which usually accompanies a hard head and an obstinate will. Instead of promptly obeying this order, and fearing that to turn over this money would leave him no recourse for the future recovery of the money he believed to be due him, he filed a demurrer. To this President VAN BUREN responded on the 4th of December, by summarily dismissing him from the army. And with this, so far as the government was concerned, the incident was closed. No amount of pleading, or threatening, or litigation, or petitioning, ever accomplished the slightest change in the attitude of the War Department. No one ever believed that General GRATIOT was guilty of anything but stubbornness and obstinacy; his character, so far as we know, was never attacked. All the same, he was ruined, officially, financially, and personally.

Two years later he was given a clerkship in the General Land Office, which he held until 1855, when, his health undermined and his spirit broken by the neglect of friends and relatives, he returned to his home to die—a victim to bureaucracy? injustice? the ingratitude of republics? Who shall say? His signature to the sale of the old fort of Fort Pierre was the last he ever wrote. It was dated the 14th of April, 1855; on the 18th of May he was dead. But all unknowingly he was contributing to a tardy retribution. He was selling to the government that had driven him out of the army for a paltry eight to ten thousand dollars; a tumble-down trading post, two thousand miles from anywhere, for \$45,000, that would have been dear at that many hundreds.

The orders for the movement of these troops were issued under date of March 23d. They provided that the four companies of the Second Infantry at Carlisle, and the two from Fort Riley, should proceed up the Missouri River in boats and establish a post in the

vicinity of Fort Pierre; the remainder of the expedition to rendezvous at Kearney and Laramie; Fort Pierre to be the principal depot, where two-thirds of the supplies should be accumulated, and arrangements made for the accommodation of four companies of cavalry and six of infantry. The movement was to be commenced at once.

Owing, however, to the difficulty encountered in obtaining vessels of proper draft, and to the want of reliable information regarding the navigation of the upper Missouri, it was the first week in July before the first troops had reached Fort Pierre. The steamboat *Australia*, which had been chartered to take the Second Infantry from Fort Leavenworth, sank en route in nine feet of water, and although the troops and baggage were saved, the public stores on board were lost and had to be replaced. The government had purchased two light draft side-wheel boats especially for this expedition, the *William Baird* and *Grey Cloud*, each drawing twenty-eight inches, and capable of carrying 350 tons on four and one-half feet of water, and had chartered every available boat at St. Louis; yet owing to the low water and difficulties of navigation, every one of them had been compelled to discharge at least half their cargoes at different points. The *Baird* and *Grey Cloud*, despite their light draft, proved too large and heavy, so that the supplies shipped in early June from St. Louis did not reach Fort Pierre until the 20th of August. All this operated to delay the expedition, so that it was feared that the season would be too far advanced for active operations.

#### THE SIOUX EXPEDITION OF 1855.

The first boat to arrive at Fort Pierre was the *Arabia*, on the 7th of July, with headquarters and Company "G" of the Second Infantry, 109 officers and men. This was followed on the 12th by the *Grey Cloud*, with eighty-two men of Company "A," and the *Baird*, with eighty-four men of Company "I," all under the command of Captain HENRY W. WESSELLS, Second Infantry. On the 14th, Major W. R. MONTGOMERY, the regimental commander, arrived with Major GAINES, of the Pay Department, and assumed command of the post. A few days later they were joined by Captain P. T. TURNLEY, of the Quartermaster's Department, Captain M. D. L. SIMPSON, Commissary of Subsistence, Assistant-Surgeon T. C. MADISON, and Lieutenant G. K. WARREN, of the Topographical Engineers; and these officers and troops formed the first garrison of Fort Pierre. On the 2d of August Captain NATHANIEL LYON, with Company "B," Second Infantry, thirty-seven men, and Company "C," thirty-five men, arrived on the

Clara, and they were joined on the 19th by Captain WILLIAM M. GARDNER, with two officers and eighty men, by the *Genoa*.

The following is a list of the officers and troops who accompanied the Sioux expedition of 1855-56 or were with the expedition at any time:

## COMMANDING.

Brevet Brigadier-General WM. S. HARNEY, Colonel Second Dragoons.

## STAFF.

Brevet Major O. F. WINSHIP, Assistant Adjutant-General.

Captain ALFRED PLEASANTON, Second Dragoons, Acting Assistant Adjutant-General.

Captain STEWART VAN VLIET, Assistant Quartermaster.

Captain P. T. TURNLEY, Assistant Quartermaster at Fort Pierre.

Captain M. D. L. SIMPSON, Subsistence Department.

Lieutenant-Colonel TIMOTHY P. ANDREWS, Pay Department.

Major BENJ. F. HARNEY, Surgeon.

Captain DAVID L. MAGRUDER, Assistant Surgeon.

First Lieutenant GEO. T. BALCH, Ordnance Corps.

Second Lieutenant G. K. WARREN, Topographical Engineers.

Second Lieutenant MARSHALL T. POLK, Second Infantry, Aide-de-Camp.

Second Lieutenant E. MCK. HUDSON, Fourth Artillery, Aide-de-Camp.

## SECOND DRAGOONS.

Lieutenant-Colonel, PHILIP ST. GEO. COOKE.

Major, M. S. HOWE.

Adjutant, THOMAS J. WRIGHT.

*Company "D."*—Captain, LAWRENCE P. GRAHAM; First Lieutenant, SAMUEL H. STARR; Second Lieutenant, JOHN PEGRAM.

*Company "E."*—First Lieutenant, WM. D. SMITH; Second Lieutenant, HENRY B. LIVINGSTON; Brevet Lieutenant, JAMES WHEELER, JR.

*Company "H."*—Captain, ALFRED PLEASANTON; First Lieutenant, JOHN BUFORD (R. Q. M.); Brevet Second Lieutenant, JOHN B. VILLIPIQUE.

*Company "K."*—First Lieutenant, WM. STEELE; First Lieutenant, BEVERLY H. ROBERTSON; Brevet Second Lieutenant, THOMAS HIGHT.

## SECOND INFANTRY.

Colonel, FRANCIS LEE.

Lieutenant-Colonel, JOHN J. ABERCROMBIE.

Major, HANNIBAL DAY.

Major, WM. R. MONTGOMERY.

Adjutant, NATHANIEL H. MCLEAN.

R. Q. M., GEO. H. PAIGE.

*Company "A."*—Captain, C. S. LOVELL; First Lieutenant, CALEB SMITH; Second Lieutenant, JOHN O. LONG.

*Company "B."*—Captain, NATHANIEL LYON; First Lieutenant, JAMES CURTIS.

*Company "C."*—Captain, NELSON H. DAVIS; First Lieutenant, THOMAS WRIGHT; Second Lieutenant, MARSHALL T. POLK (A. D. C.).

*Company "D."*—Captain, WM. M. GARDNER; First Lieutenant, H. M. McLEAN (Regimental Adjutant); Second Lieutenant, JOHN D. O'CONNELL.

*Company "G."*—Captain, HENRY W. WESSELLS; First Lieutenant, GEORGE H. PAIGE (R. Q. M.); Second Lieutenant, ALFRED E. LATIMER.

*Company "I."*—Captain, DELOZIER DAVIDSON; First Lieutenant, THOS. W. SWEENEY; Second Lieutenant, HENRY A. SARGEANT.

#### SIXTH INFANTRY.

Major, ALBERMARLE CADY.

*Company "A."*—Captain, JOHN B. S. TODD; Second Lieutenant, SILAS P. HIGGINS.

*Company "E."*—Captain, SAMUEL WOODS; First Lieutenant, DARIUS D. CLARK; Second Lieutenant, JAMES A. SMITH.

*Company "H."*—Captain, THOMAS HENDRICKSON; Second Lieutenant, CHAS. G. SAWTELLE.

*Company "K."*—Captain, RICHARD B. GARNETT; Second Lieutenant, R. E. PATTERSON.

*Company "C."*—Second Lieutenant, JOHN McCLEARY.

#### TENTH INFANTRY.

*Company "E."*—Captain, HENRY HETH; First Lieutenant, NATHAN A. M. DUDLEY.

#### FOURTH ARTILLERY.

*Light Battery "G."*—Captain, ALBIN P. HOWE; First Lieutenant, RICHARD C. DRUM; First Lieutenant, EDWARD McK. HUDSON; Second Lieutenant, JOHN MENDENHALL.

#### TROOPS.

*Second Infantry.*—Companies A, B, C, D, G and I.

*Sixth Infantry.*—Companies A, E, H and K.

*Tenth Infantry.*—Company E.

*Second Dragoons.*—Companies D, E, H and K.

*Fourth Artillery.*—Light Battery G.

The necessity of leaving small detachments in charge of the stores that had been discharged at various points along the river, protracted the conclusion of this primary movement until nearly the 1st of September. Major WESSELLS, with his company, had been sent down to old Fort George, twenty miles below the Teton, where the transports had been compelled to leave a portion of their cargoes, and another company was sent to Running Water for a like purpose. This garrison was now the furthest advanced of any that had been thrown into the Indian country. It was 1,525 miles from St. Louis by water—325 from Fort Laramie to the southwest, and

350 from Fort Ridgeley to the northeast. Its nearest postoffice was at Council City, on the Missouri, 425 miles distant, though one was established that winter at Sergeants Bluff, 100 miles nearer.

The early apprehensions concerning the unsuitableness of Fort Pierre for the purpose for which it had been selected, are now fully realized. Captain TURNLEY, the quartermaster, on his arrival, reports that the new post is a gloomy, sterile place—no grass within six miles, no wood within twelve; the huts one-story, out of repair, and not worth the expense of repairing; has seen no one authorized to turn over the premises; has no animals except those he has borrowed from the Fur Company; could take the engine out of the *Baird* and run the saw-mill, if he could get a boiler; is generally disheartened. A board of officers is next assembled to inspect the purchase. They find the whole establishment "in bad order, bad condition and bad repair;" all of the buildings in such a dilapidated condition that they will simply have to be built over again; the pickets rotted off near the ground and falling down; the saw-mill old, worn out, and of very little value. They estimate that it will cost \$22,000 to put the establishment into anything approaching the condition called for under the agreement of purchase. Then ensued a wordy dispute. Mr. GALPIN, the agent of CHOUTEAU, claimed that the company was selling a "trading-post" and not a military fort, and that for a trading-post it was all it had been represented to be; that the government has sent more than twice the amount of supplies and number of troops it had agreed to; \$3,000 would be an ample allowance for repairs. In the end, the War Department paid the full price agreed upon, in sheer disgust at the manner in which it had been duped.

But the inadequacy of the stockade was inconsequential when compared with the utter barrenness of the surrounding country. The fort was delightfully located upon a level plain about 300 feet from the river, and within was reasonably comfortable. Without, was utter desolation. For eight miles below and above the post, on the west side of the river, neither building timber, fuel nor grass could be found that was worth the hauling; on the opposite bank (to cross which was to encounter low water, quicksands and high winds, which last frequently closed navigation entirely for three days at a time) a fair supply of miserable grass could be found ten or twelve miles below, and fuel eight miles above. It would have been difficult to have made a more unfortunate selection. Fort Pierre had no doubt been wisely located in 1830, but its twenty-five years of subsequent occupation had absolutely exhausted the re-

sources of the surrounding country. The statements of Mr. SARPY, when first approached in St. Louis, as to the suitability of this place for the purposes desired, were fully borne out by the facts; the company had not misrepresented it nor concealed the truth.

#### HARNEY WINTERS AT FORT PIERRE.

General HARNEY, with his fighting force, arrived on the 19th of October, having marched across from Fort Laramie, skirted the headwaters of the White Earth River, through the Brule country, for one hundred miles, and along the Cheyenne for another hundred. He had found no Indians, but found signs indicating that they had gone toward the headwaters of the Little Missouri and Powder. Deeming it impracticable to penetrate that section so late in the year, he had concluded to go into winter quarters at Fort Pierre. On the 3d of September he had encountered a party of Brules near Ash Hollow, and after a sharp engagement had utterly routed them; the results were eighty-six Indians killed, five wounded, seventy women and children captured, together with all their provisions and camp equipage. Recognizing at once the impossibility of wintering his command within the fort, he took measures to otherwise dispose of them. The four companies of the Second Infantry, under Major WESSELLS, were sent to a point on the east bank about five miles above the post, to establish a winter cantonment; two other companies of the Second, with two troops of dragoons, to a point on the east bank eighteen miles above; Major CADY, with four companies of the Sixth Infantry, to a point on the west bank ten miles above, to which he gave the name of Camp Bacon; and Major HOWE, with a troop of dragoons and fifty men from the Second Infantry, to a point between the mouth of the White and L'eau-qui-court, to which he gave the name of Cantonment Canfield. Captain GARDNER, with the three companies of the Second, who had located on the east bank seven and one-half miles above Fort Pierre, also went into winter cantonment (which he called Cantonment Miller), as did the company at Farm Island. The aggregate of this force was 897 officers and men.

General HARNEY's report of the situation in December, 1855, is clothed in strong language. He thinks the first arrivals should have lost no time in rendering their position comfortable for the winter; that their disadvantageous position, the dilapidated state of the fort, should have determined them to move on, either up or down the



river, to some spot where wood and grass could have been found; that five miles further on, on the east bank, he would have found a position adapted to all his wants. "In conclusion," he remarks, "it was unfortunate that the steamers purchased to transport the troops here were entirely too large for the purpose; it is unfortunate that my orders were disobeyed in that purchase; it is unfortunate the troops did not arrive in this country earlier; it is unfortunate they were stopped here; and most unfortunate of all was the absence of a commander of energy, experience and industry."

On the 25th of April General HARNEY had been directed to cause a military reservation to be laid off about Fort Pierre of such extent as might be required for public purposes, and this duty was performed by Lieutenant G. K. WARREN, of the Topographical Engineers. On account of the limited resources of the surrounding country, he found it necessary to include all the territory between the Antelope and the Chautier. It extended by the river sixteen miles above the post to twelve miles below; its length east and west was twenty-two and one-half miles, and its breadth north and south twelve and one-half. This gave an area of about 270 square miles, or nearly 175,000 acres, only about 10,000 of which were of any value. He made a very careful survey of the country, and was disposed to believe that the year was an unusual one, and that longer experience may show it to better advantage. At the site of the fort he found the grass to have been killed by the Indian lodges, and all the cottonwood destroyed in giving the bark to their horses in the winter. The landing was a changing one, as high water frequently put a sand bar in front of the fort a half mile wide; the boats were obliged to discharge a mile below the fort. He found GALPIN and his party, who had vacated Fort Pierre on the arrival of the troops, camped about four miles above the Chautier, and DUPUIS, with the party from Fort George, on the north side of the mouth of the Cheyenne. He concludes that whatever "may be the comparative defects in the site of Fort Pierre for a military post, it is evident that it is the only one in this part of the country that could be occupied this year as a depot, and the labor that will have been expended before another season comes around, may render the removal of the post an affair of doubtful expediency."



## SEARCHING FOR A SITE.

General HARNEY, however, was unwilling to expend any money upon the site of Fort Pierre, and much of the winter of 1855-6 was devoted to a careful reconnaissance of the surrounding country, with a view to discovering a better one. Several times he thinks he has found it. Under date of January 20, 1856, writing from Ponca Island, in the Missouri, he thinks that a post on the west side of the Big Sioux is indispensable, and that with a second at a suitable point on the Missouri, there will be no longer necessity for keeping up Forts Riley and Leavenworth. But returning to Fort Pierre on the 22d of February, he has become fully satisfied that after all Fort Pierre is the best position on the river for a depot; that a large force should be established at some point between Fort Clark and the mouth of the Yellowstone, and another at the headwaters of the Little Missouri, and desires that supplies be forwarded to those points at once. But some two weeks later (March 9th) his mind has undergone a change. He has learned of an insuperable objection to Fort Pierre as a military position, and that is, that freight cannot be landed within five miles above or three miles below. So he has concluded to remove from Fort Pierre to the site of old Fort Lookout, about twelve miles below the Big Bend; is already engaged in taking down the cottages and will move as soon as he can get a steamboat. He has also decided to establish his second position at a point opposite the mouth of Apple Creek, three miles below Heart River and sixty below Fort Clark, and will send a force to that place as soon as the steamers arrive. His next letters are dated June 30th, and advise the Department that he has now no intention of occupying the site near Old Fort Lookout, but has fixed upon a point on the west side of the Missouri, thirty miles above the mouth of the L'eau-qui-court, has caused his stores to be landed there, and will send all the troops from Fort Pierre, except two companies, as soon as possible. He suggests for this post the name of Fort Randall, as a token of respect to the memory of DANIEL RANDALL, late colonel and deputy paymaster-general of the army.

It is difficult to reconcile the official reports of General HARNEY's intentions with his actual performances. It is possible that he was influenced by conditions which it was impossible for him to anticipate or for us to understand at the distance of nearly half a century, for after advising the department of his abandonment of the plan to establish a post at the site of old Fort Lookout, he seems to have lost no time in sending a garrison there. Companies "D" and "H"

of the Second Dragoons arrived at that point on the 3d of June, 1856, under the command of Captain LAWRENCE P. GRAHAM, and remained until the 3d of August, when they were relieved by Companies "C" and "I" of the Second Infantry from Fort Pierre, and "B" and "D" from Cantonment Miller, with a total strength of 278 officers and men, all under the command of Captain NATHANIEL LYON of the Second Infantry. Captain LYON's order assuming the command of the post directs that "the name of the station be continued—in the absence of orders to the contrary—as Fort Lookout, by which it will hereafter be known." In a letter dated Fort Lookout, Nebraska Territory, September 1, 1856, Captain LYON remarks that he is located on an elevation gently sloping toward the river, which runs at a good speed, and affords good landing at the point where the river steamer *Goddin* lands her freight and is well adapted for building without any artificial grading; that timber, fuel and grass are tolerably convenient, and that his nearest post-office is at Sioux City, Iowa, 200 miles to the south.

Companies "C" and "I" left for Fort Randall during the month of August, but "E," "G," "H" and "K," with Lieutenant-Colonel ABERCROMBIE, arrived on the 2d of October; the two first named continuing their march to Fort Randall, leaving the Lieutenant-Colonel with Companies "B," "D," "H" and "K," five officers and 245 men, to constitute the garrison during the winter of 1856-7. Colonel ABERCROMBIE reports his march from Fort Pierre to have covered 310 miles, and as having been accomplished in twenty-five days; that he found the country traversed to be the worst possible, there being scarcely a stick of wood or a water hole from the James to the Missouri. He has no disposition to question the motives of those who sent him to this barren point, but trusts he may not be required to remain there longer than may be necessary to carry out the purposes of the War Department.

In the meantime the small garrison at Fort Pierre were patiently awaiting the outcome of the explorations which General HARNEY had set on foot. It was August before his dispatches had reached Washington, and by this time a new treaty had been made with the Sioux, by which they promised better behavior in future, and the Sioux expedition had been accordingly recalled. General HARNEY had been told that the Department agreed with him that the vicinity of the L'eau-qui-court is a proper site for a military post, but that it would not be advisable to attempt to establish a post in advance of Fort Pierre. In the meantime Colonel FRANCIS LEE, of the Second Infantry, had arrived and assumed command of the post, which on

the 31st of May numbered nineteen officers and 447 men. But on receipt of these instructions about July 28th, headquarters and Companies "B" and "D" left for Fort Lookout, and "C" and "I" for the new Fort Randall, leaving "A" and "G," six officers and 169 men, under the command of Captain C. S. LOVELL, Second Infantry, who had arrived during the disbandment of the expedition. Company "F" of the Second Infantry with Captain ALFRED SULLY and Second Lieutenant R. F. HUNTER with thirty-nine men, joined on the 26th of September, when Company "G" left for Fort Randall, leaving Captain LOVELL with Companies "A" and "F," six officers and 110 men, to form the garrison during the winter of 1856-7 which was to be the last occupation of the old trading post.

#### FORT PIERRE ABANDONED.

As soon as navigation opened in the spring of 1857, the steamer *D. H. Morton* was sent up the river from St. Louis, and on the 16th of May Captain LOVELL and his men embarked for Fort Randall, taking with them all movable stores and property, and Fort Pierre was as a military post finally abandoned.

And this was about the last of it as a visible entity. Messrs. D. M. FROST & Co., who had been trading at this and other frontier posts, were appointed custodians of the United States property at Pierre and Lookout, from which latter posts the troops had departed for Fort Randall on the 17th of June, and those people seem to have delayed the exercise of their trust until there was little left to guard.

FROST, who by the way, is still living near St. Louis, a New Yorker of good family who had graduated in 1844 and won his brevet at Cerro Gordo, and had resigned from the Mounted Rifles in 1853 to enter upon a mercantile career, was well known to most officers of the ante bellum period. After leaving the army he entered politics, became a legislator and senator of Missouri, colonel and general of militia; a visitor to West Point, a writer of some distinction, and a farmer of repute beyond his own horizon. He was among the first to join fortunes with the Confederacy, in whose service he rose to the rank of a brigadier-general, and to whose ill fated cause he contributed the most of his means. His reminiscences of the old army, as General SHERIDAN used to say, would make "some mighty interesting reading."

Mr. GALPIN, of the American Fur Co., had contracted to take down and transport to Fort Randall all the cottages and other movable property, but in doing so he seems to have converted about

one-half of it to his own purposes, for which irregularity the government retained something more than one-half the contract money. After GALPIN had gone, the Indians came in and took what he had left, smashed in the doors, broke the windows, and plugged up the fire-places; the elements completed the work. When Captain PAIGE, of the Quartermaster's Department, visited the place in November, he found little more than a shell, but this he repaired as best he could. "It has become necessary," he reports, "to reduce the form of the fort, cutting off one corner of the rectangular form of it, and leaving out the southeastern blockhouse. I have directed FROST & Co. to repair the picketing so as to include the blockhouse, and for that purpose have directed them to use all logs and lumber found in the vicinity of the fort. \* \* \* On visiting Fort Lookout," he adds, "I found that there was not a single article of any description left there that could be used." But by this time the War Department was so thoroughly dissatisfied with its bargain that it was disinclined to have anything more to do with it. "The public should not be subjected to the expense of repairing the buildings or making improvements at Fort Pierre," writes the Quartermaster-General to Captain PAIGE, "and no expenditure of its means for this purpose will be allowed."

Then ensued some wordy correspondence; the custodians claiming that the American Fur Co. was endeavoring to regain the property, and the latter asserting with equal vehemence that while it was true that the government was being plundered, it was not being done by the American Fur Co., but by others whom it were unnecessary to name; and in the midst of the controversy the winds and rains were rapidly removing the bone of contention.

Captain W. F. RAYNOLDS, of the Engineers, who made an exploration of the Missouri and Yellowstone in 1859, held a talk with the Dakota Indians at Fort Pierre on the 18th of June of that year, and on the return from his journey, notes in his diary under date of September 10, 1859: "As we passed old Fort Pierre, I noticed that but little was left of the structure; the remains, consisting of the shell of one row of houses, and the demolition of this was in progress, the material being used in the new fort" (Randall).

#### FORT RANDALL.

Fort Randall, thirty miles above the mouth of the L'eau-qui-court, or Niobrara, had now become the successor of all the lesser posts on the upper Missouri, as well as the legatee of the Sioux expedi-

tion. It was expected to hold the Sioux tribes to their treaty promises; to keep open the highway between Ridgeley and Laramie, and to act as a base of supplies for operations along the upper Missouri. It had been selected by General HARNEY after a careful reconnaissance of the surrounding country, and on the 26th of June, 1856, a party of eighty-four recruits of the Second Infantry, under the regimental quartermaster, Lieutenant GEO. H. PAIGE and First Lieutenant D. S. STANLEY, of the First Regiment of Cavalry, had landed at the point, laid out the post, and set up the first cottages. In August, Companies "C" and "I" of the Second Infantry, and "D," "E," "H" and "K" of the Second Dragoons arrived, under the command of Colonel FRANCIS LEE, and these troops constituted the first garrison. It was located on the second terrace above the river, having at the rear a range of hills perhaps one hundred and fifty feet in height, which at a level a little below their summit, spreads out into a third terrace in the nature of a rolling prairie. The post was laid out at a situation nearly half a mile from the river, which at this point is nearly 1,000 yards wide, and navigable for light draft steamboats. Two years later, by the treaty of April 19, 1858, with the Yanktonias, four hundred thousand acres of land to the east and northeast was set apart as an Indian reservation for the Yankton tribes, and later a similar tract to the south about half as large was reserved for the Poncas. Between these two bands of Sioux, Fort Randall stood as a sentinel for nearly half a century.

Colonel LEE and the Second Infantry (from 250 to 300 officers and men) formed the garrison from the date of establishment until the summer of 1859, and during this time the career of Fort Randall was uneventful. On the 5th of that month, headquarters and Companies "E," "L" and "M," of the Fourth Artillery, under the command of Lieutenant-Colonel JOHN MONROE, followed a few days later by "H" and "I," arrived, and went into camp just below the fort, and on the 16th the companies of the Second Infantry marched out and those of the artillery took their places. Then followed another two years of quiet. The Indians were peaceable, devoted to the chase and such agricultural pursuits as the country permitted, and rapidly accommodated themselves to reservation life. They disposed of their furs and hides to the traders much as formerly, though the approach of the settler was gradually driving the buffalo and smaller game to the great forests of the Northwest. As has been stated, the American Fur Co., after disposing of the establishment at Fort Pierre to the United States, had moved further up the river and located trading-houses at the mouths of the Chautier and

Cheyenne, at both of which points there were Indian villages. About the same time another party, under Jo. LAFRAMBOISE, a *bois brûlé*, who had served a long apprenticeship to the Company along the headwaters of the Mississippi, and had been present in Washington at the signing of the famous treaty with the Sioux on the 29th of September, 1837, which had made possible the creation of Minnesota Territory, had landed on the left bank about four miles above Fort Pierre, opposite Lost Island, where there was a small village of Oabes, and put up a trading-house, which soon became known as Fort Laframboise. But on the whole, the fur trade east of the Rockies was nearing its end. The government had extended its paternal hand over the redman; the Indian Bureau was sending him calicoes and blankets, groceries and trinkets; was driving to him beef cattle by the thousands, and even supplying him with fire arms, with which he afterwards fought the government, and with fire-water, which furnished him the courage and incentive to raid the settlements. But all this was in the future; for the present there was nothing but peace and tranquility from the Big Sioux to the Yellowstone.

All the same the world was moving. Fort Pierre and its entourage, which at first was a part of the great Northwest Territory, had changed their allegiance from Louisiana to Missouri; from Missouri to Nebraska, and from Nebraska to Dakota. An act of Congress of May 31, 1854, had authorized the erection in mid-continent of two huge Territories, and permitted their inhabitants to decide for themselves whether slavery should or should not exist within their limits. This apparently harmless legislation had formed the occasion for one of the greatest political struggles the world has ever seen. While the upper Missouri was enjoying a monotonous peace, its lower banks were noisy with the strife of an irrepressible conflict. The peaceful days that had marked the existence of the garrisons at Pierre and Ridgeley and Randall had ended; the controversy that began at LeCompton and Lawrence was to end only at Appomattox.

The breaking out of the War of the Rebellion found these five companies of the Fourth Artillery still at Fort Randall, and it was quite a little advanced before it was found convenient to relieve all of them. In May, Companies "E," "I" and "L" had been sent to the East to be mounted as light batteries, leaving "H" and "M" under the command of Captain JOHN A. BROWN, a native of Maryland, and counted to be loyal to the Union. About all the other officers had either been ordered East, or on various pretexts had

managed to get there. It is said that Captain BROWN was induced by his wife—an estimable lady of Southern birth—against his own inclinations, to cast his fortunes with the Confederacy; the facts are, that he left his post without permission and was not heard from for several months, or until his resignation reached the War Department from a Southern city some time in July, 1861. This left the command of the post to the only commissioned officer who remained, Second Lieutenant T. R. TANNATT, and for the following six months this officer and his brave little garrison of something less than one hundred men, remained alone and apparently forgotten at this outpost of civilization, surrounded by Indians, whose friendship at all times doubtful, was made more so by the importunities of Confederate agents, and exposed to dangers far greater than their comrades in the field. It was not until the middle of December, when three companies of the Fourteenth Iowa Volunteers, under the command of Captain BRADLEY MAHANA, from Iowa City and its neighborhood, came up the river from Sioux City, and made camp on the river bottom, that relief came. These two artillery companies were then sent to Louisville, Ky., where they were united to form a light battery, and as such performed most valiant and distinguished service in the Army of the Cumberland during the greater part of the war.

#### ANOTHER FORT PIERRE.

The demolition of old Fort Pierre while it removed a prominent landmark, had little or no effect upon the perpetuation of the name as a point of rendezvous. Men journeying from opposite ends of the continent still appointed Fort Pierre as a place of meeting; trappers, traders, emigrants, red men and white men of every degree, continued to talk and write and sing of it as though it were still the busy scene on which GEORGE CATLIN had looked down on that May morning of 1832, when six thousand friendly Sioux were welcoming old PIERRE CHOUTEAU at the landing place; even the government which had itself issued the mandate that had leveled the walls of the old fort, and transported its materials to build Fort Randall one hundred miles away, continued to regard it as an absolute and undisturbed substantiality, making it the scene of present and prospective conferences and rendezvous and meetings, and always and everywhere disregarding its non-existence. All this to the confusion of the present historian, no less than to those who have preceded him. But the truth is, that in the parlance of the prairies the words



"Fort Pierre" were in themselves a phrase. They included anything and everything from the Great Bend to the Cheyenne, and between the Jim River and the Black Hills. A recognition of this fact will explain many otherwise contradictory passages in the history of the plains. "I left St. Louis on the 10th of May, 1862," reports Mr. LATTA, the agent for the upper Missouri tribes "in charge of the annuity goods on board the steamer *Spread Eagle*. We arrived at Fort Pierre on the 27th, where I found from two to three thousand Indians, portions of the several bands of Sioux, awaiting my arrival. In the morning their goods were placed on the shore in seven parcels, conforming as nearly as possible to the population of each; the Brules, Blackfeet, Sans-Arc, Minnicongies, Unc-pa-pas, Two Kettles and Yanktonais, all being Dakota Sioux." Then ensued a consultation, which because of the event that followed is now historical.

"They stated that they regretted to see me without a military force to protect them from that portion of their several bands who were hostile to the government, and that they were friends to the white men, and desired to live on friendly relations with the government and fulfill their treaty obligations. That General HARNEY, at Pierre, in 1856, had promised them aid; that they were greatly in the minority; that that portion of their people opposed to the government were more hostile than ever before; that they had, year after year, been promised the fulfillment of this pledge, but since none had come, they must now break off their friendly relations with the government and rejoin their respective bands, as they could hold out no longer; that their lives and property were threatened in case they accepted any more goods from the government; that the small amount of annuities given them did not give satisfaction; it created discord rather than harmony, nor would it justify them to come in so far to receive them; that they had been friends to the government and all white men; had lived up to their pledges made at Laramie in 1857, as far as it was possible under the circumstances, and still wished to do so, but must henceforth be excused unless their Great Father would aid them.

"They requested me to bring no more goods under the Laramie treaty, nor would they receive those present. The same views were expressed by all the speakers, but after a long parley BEAR'S RIB, a chief of the Sioux nation appointed by General HARNEY, a brave and good man, rose and said in the most touching manner, that for eleven years he had been the friend of the white man and the government; that for years he had relied upon promises made by

General HARNEY and former agents to send him assistance, yet none had come; that if he received those presents sent his people by his Great Father, he not only endangered his own life but the lives of all present; yet he loved his Great Father and would this once more receive for his people the goods present, but closed by requesting me to bring no more unless they could have assistance. A few days after this delivery, and after I had left, that portion of the Sans-Arc band opposed to any intercourse with the government came in from the prairies, assaulted and killed, within the gates of Fort Pierre, this true man, the best friend the white man had in the Sioux nation. Several others were killed in the affray. BEAR'S RIB was chief of the Unc-pa-pas, and that portion of his band friendly to the government who were present, numbering some 250, are now wandering outcasts in the country."

The scene of this murder, which Mr. LATTA locates at Fort Pierre, was actually at the trading post on the left bank, about three miles above the site of old Fort Pierre, which had been established by Jo LAFRAMBOISE in 1857 or 1858, and had been known for a time as Fort Laframboise. It was built on the bluff on the edge of the river, with neither timber nor grass within a mile, and had been selected merely on account of there being a good landing place at that point. It included a store, store-keeper's dwelling, a barrack for the employees, and two smaller houses, all of logs, and the whole surrounded by a stockade of cottonwood pickets, fifteen feet in height with bastions at diagonal corners. This small establishment soon became known as Fort Pierre, though it was a most unworthy and insignificant successor to the original; many of the first settlers in that section never knew any other. To confuse the situation, the island in the river opposite old Fort Pierre is known to this day as Laframboise Island, while the island opposite the new fort, on which Jo LAFRAMBOISE used to pasture his chickens, is known as Lost Island. But this is of course merely *en passant*.

#### THE SIOUX MASSACRES IN MINNESOTA.

The growing discontent among the Sioux, growing out of the neglect of the government to fulfill the promises made by General HARNEY at Fort Pierre in 1856, which were expressed to Agent LATTA on the 28th of May, 1862, and more forcibly demonstrated by the murder of BEAR'S RIB, was rapidly extending, though it was difficult to make any one believe it. Repeated warnings of friendly

Indians were laughed at; the whispered reports of trappers and woodmen who were quietly stealing back into civilization, that something serious was on foot, were regarded as the vapid wanderings of a timid fraternity. An outbreak at the Sisseton Agency was only prevented by the timely arrival of the troops from Fort Ridgely; the Indians balked in their purpose, scattered about the country. On the 17th of August, five persons were murdered at Acton in Meeker County, Minnesota, and this was followed by a series of cruel and barbarous deeds characterized by every savage atrocity and barbarity known to Indian ingenuity. Neither age, sex, nor condition was spared. Within a week from 800 to 1,000 quiet, inoffensive and unarmed settlers fell victims to savage fury. The town of New Ulm, on the Minnesota River, containing from 1,500 to 2,000 inhabitants, was almost entirely destroyed. Fort Ridgely was attacked, closely besieged, and was only saved by the heroic and unfaltering bravery of its small band of less than fifty defenders. Meantime the utmost consternation and alarm prevailed throughout the entire community. Thousands of homes were abandoned; every avenue leading to the more densely populated sections was crowded with homeless and distracted fugitives. As rapidly as possible armed men were hurried to the scene from St. Paul and vicinity, but it was some days before any considerable force could be dispatched against the Indians, and in the meanwhile they were escaping to the hills, killing, burning and devastating as they went.

The news of the uprising in Minnesota, as usual in such cases, was the signal for an ominous restlessness on the part of even the most peaceable tribesmen within five hundred miles. On the 8th of September the Governor of Iowa telegraphed the Secretary of War that the Yanktons, on his western borders, had joined the hostiles; that the settlers were fleeing by thousands; that danger was imminent, and prompt action alone could save a terrible massacre. Similar telegrams came in from the Governors of Nebraska and Dakota. There was a regiment under organization at Des Moines, and these men were hurried to Sioux City; the militia of Nebraska and Dakota were called into the field; settlers were fleeing in every direction; every road was lined with terror-stricken families, fleeing from a danger that to the most of them was wholly nebulous. On the 12th the panic had reached Kansas. The Governor summoned every able-bodied citizen to organize for home defense, and called upon the War Department for five thousand stand of arms. By the 15th of September a large majority of the settlers of eastern and southern Dakota, as well as northwest Iowa, had congregated at Sioux City.

All had left in great haste, leaving their stock uncared for, their crops unharvested, in short, had abandoned all their earthly possessions. Bon Homme, Vermillion, and in fact every town and settlement in Dakota was deserted, so that every white man left in the Territory was at Fort Randall or at the Yankton Agency, which was being hurriedly fortified. Lieutepant-Colonel NUTT, a very bright and observing aide of Governor KIRKWOOD, who had been sent to the scene of disturbance, writes from Sioux City on the 15th of September that he has every reason to believe that a general Indian war is imminent. He adds: "I saw, while at Sioux City, Captain LU BARJE, who had just returned with his boat from the upper Missouri. Captain LU BARJE has been in the American Fur Company's employment for twenty five years, and says that never before this trip have the Indians been unusually hostile. He says the whole Sioux Nation is bound for a war of extermination against the frontier, but says they will not come to Sioux City, but go down by Forts Laramie and Kearney and beyond. Captain LU BARJE says that the British government, through the Hudson Bay Company, are, in his opinion, instigating all these Indians to attack the whites. He says British rum, from Red River, comes over onto the Missouri River, and British traders are among them continually. I have great confidence in his judgment and opinion. He says there are at present no Indians within three hundred miles of Sioux City, on the Missouri River, but that government must send a force and punish these Minnesota Indians, or the whole western frontier, from St. Paul to New Mexico, will be attacked; but if those are punished, he thinks the rest will be all good Indians, and no danger." In the meantime, all southeastern Minnesota was aroused, and the hastily summoned troops under SIBLEY were on the trail of the fugitives, who were making rapidly for the Dakota frontier.

#### SIBLEY PURSUES THEM.

Colonel H. H. SIBLEY, to whom had been intrusted the pursuit and punishment of LITTLE CROW and his diabolical band, was perhaps the best known, and certainly the most popular, man in the Northwest for more than the decade preceding the Civil War. He had been a woodsman, trapper, a hunter of big game, an attache and then a partner of the American Fur Company, by means of which he had acquired a handsome competency. Then he had gone into politics as a diversion; spent a term in Congress as a representative

from Wisconsin and two more from Minnesota; the latter so satisfactorily, that he was transferred to the gubernatorial chair at St. Paul. After two terms he declined a reelection, refused, as well, to don the senatorial toga, and tired of worldly honors, built him a magnificent establishment at Mendota, the first stone house in Minnesota, and retired to live out his days as a country gentleman. This was where the news of the infamous deeds of the Dakota Sioux found him, about 4 o'clock on the afternoon of the 21st of August. Springing into the saddle, he rode into St. Paul, where he met Governor RAMSAY, who gave him the necessary authority to pursue the murderers; gathered a party of twenty-five horsemen—all he could find who were prepared to start at a moment's notice—and before daylight of the 22d was on the road to Ridgeley. Within less than five weeks he had organized a force of 1,500 men, marched 250 miles, corralled the Indians near the Yellow Medicine, where he attacked and soundly whipped them on the 23d of September, leaving the most active of the warriors dead on the field. Two days later he rounded up the balance and captured something over 2,000, with all their property, the most of which had been stolen from the settlers. LITTLE CROW managed to escape with about 300 of his followers, but was ultimately chased into the Black Hills and killed without much mercy. In course of time the ringleaders were tried by military commission, found guilty and sentenced to hang, but through the sympathy of the President all but about forty of them managed to escape a penalty so thoroughly deserved.

#### FORT THOMPSON.

If we have wandered for a moment from the immediate vicinity of Fort Pierre, it is that we may the more readily return to it. The old scene is about to take on a renewed life; to awaken once more at the shrill notes of the reveille, and start into action at the sound of "boots and saddles." The uprising in Minnesota had created a new ground of hatred of the red man, and a determination to give him no quarter in the future. The effect of their outrages was naturally to incense the white people of Minnesota against, not only the individual perpetrators and their tribes, but against all Indians within their borders. This sentiment found expression in the act of Congress of February 21, 1863, whereby the President was authorized to remove the Winnebagos from Minnesota to unoccupied lands beyond the limits of any State. In the carrying out of this

law it was determined to locate them, together with the Mississippi Sioux, on the Missouri River at some point within one hundred miles of Fort Randall, where they might be secure from any danger or intrusion from the whites. Mr. CLARK W. THOMPSON, the very efficient Superintendent of Indian Affairs for what was called the Northern Superintendency, who had been sent forward to select the location, assisted by agent BURLEIGH and some officers from Fort Randall, examined the surrounding country and finally fixed upon the mouth of Crow Creek, about midway between Fort Randall and Fort Pierre, and there, on the 30th of May, 1863, they landed the Indians, 3,250 in number, and their belongings, and laid off their reservation. Assisted by a detail of sixty soldiers from Fort Randall, they erected all necessary agency buildings within a square of about 400 by 300 feet, which they surrounded by a stockade of cottonwood logs. A company of Volunteers from the Sixth Iowa Cavalry was left as a guard, which was joined later by a second company, and these, with the ordinary white employees and camp followers, made up a community that formed one of the largest in the Territory. Although officially known at Washington as the Winnebago or the Crow Creek Agency, the stockaded character of the establishment, assisted perhaps by the disposition of all frontier people to identify points of rendezvous by the name of fort, soon caused it to become locally known as Fort Thompson, no doubt in compliment to its energetic founder, and as "old Fort Thompson" it still appears on the maps.

Thirty years after, in a pamphlet of local circulation which I have happened upon by chance, an old Iowa cavalryman, who marched with SULLY in 1863, is thus minded to recall his visit to the Winnebago settlement in 1864. It is the only photograph we shall ever have of old Fort Thompson:

"It is laid out in a square some three hundred feet each way. Around the whole square was dug a ditch some three feet deep, and the same width. In this are set cedar pickets fifteen feet long, which leave them twelve feet above ground. On the west side are two stores and one warehouse, just coming out flush with the pickets. On the north side is the Winnebago school house, the interpreter's quarters, the agent's quarters, and the doctor's quarters. On the corner were barracks for soldiers. On the east side are the boarding house, blacksmith, wagonmaker's and carpenter shops. On the south side are the Sioux buildings, one doctor's quarters, two agents' quarters, the three interpreters' quarters, and four school houses, and on the corner, barracks for soldiers. On the northwest and



southeast corners are bastions outside of the pickets. The pickets are sawed on three sides, the outsides being left rough. Holes for guns were made some eight feet from the ground and about twelve feet apart. On the north and south sides are each a gate, made of the same kind of material as the pickets. The saw-mill is on the west side of the fort and about fifteen rods from it in the edge of the timber. Still further on in the timber are the Indian wigwams. The river is about half a mile from the fort and pretty heavy timber. It is situated on a beautiful plain, and in a fine place for defense. Such is Crow Creek as I saw it."\*

#### THE SIOUX CAMPAIGN OF 1863.

We left *LITTLE CROW* fleeing from the battlefield of Wood Lake, where *SIBLEY* had administered such a drubbing as was to free Minnesota for all the future from all dread of the redman. This was about the 25th of September. With about three hundred warriors he followed up the Minnesota as far as the *Lac qui-parle*, where he struck for the Dakota line, which he crossed at about the location of the present town of Elkton, in Brookings County, where the Burlington & Cedar Rapids Railway crosses the Chicago & Northwestern; thence following nearly due west along what was known forty years ago as the Medary Trail, and avoiding the settlements, he crossed the James at about the present site of Huron, in Beadle County, and made camp not far from the headwaters of Crow Creek. From this point he sent a messenger to the Yanktons, many of whom had left their reservation near Fort Randall, and to the tribes on the upper Missouri. On the 24th of December Governor *JAYNE*, of Dakota, telegraphed the President that "*LITTLE CROW*, *WHITE LODGE*, *SLEEPY EYES*, *PAWN* and *BIGHEAD*, with from 500 to 1,000 Santee and Yankton warriors, are on the Missouri above Fort Pierre preparing for an early spring campaign against the whites; that they are burning, robbing, murdering, and driving out every person in that region, and that the whole Territory is in a condition of terror." This was the first intimation that *LITTLE CROW* had succeeded in gaining accessions to his murderous company. On the 27th of December, thirty-eight of those captured at Wood Lake were hung at Mankato, and the news, which was carried with the speed of the wind to *LITTLE CROW*, simply infuriated him. From this moment he vowed an unrelenting war against the race, and before spring

\*From "Three Years Among the Indians in Dakota," by J. H. *DRIPS*, sergeant Company "L" Sixth Iowa Cavalry. (Kimball, S. D., 1894.)



had opened he had killed or driven every white person from the Territory.

In the early stages of the Indian uprising General JOHN POPE, who had been more or less of a failure at the head of the Army of Virginia, had been sent to the scene of the disturbances, and given the new Department of the Northwest, a command more in harmony with his undoubted military and executive ability. POPE lost much time in setting his Dakota campaign in motion; perhaps no more than was necessary, as the troops and wagon trains were slow in getting to him and the winter was an uncommonly severe one. His plan was for SIBLEY to move in two columns, each of 2,500 men, and six pieces of artillery, the one from the mouth of Yellow Medicine along a line due west, the second along the Big Sioux west by south; both to push forward cautiously and scour the valley of the James. It was believed that LITTLE CROW was in the vicinity of Devil's Lake, but would be moving south as soon as the grass was high enough to feed his animals. SIBLEY was to engage him, if possible, if not, to drive him toward the Missouri. At the same time a third column, under JOHN COOK, an Illinois colonel, who had just been made a brigadier-general, and sent to bring order out of the chaos at Sioux City, was to move up the Missouri from Fort Randall, so as to intercept the Indian retreat. It is possible that these plans, if carried out, would have speedily ended the campaign. Why they were not, it is difficult to say. To the ordinary observer of to-day, who has merely the official documents to guide him, the whole campaign looks very much like a blunder. It may have been a stroke of genius. It depends, no doubt, upon the point of view. After much backing and filling, angry correspondence, and petulant, if not querulous faultfinding, SIBLEY got away from Fort Ridgely on the 23d of June, 1863, with 2,000 infantry, 800 cavalry, and some mountain howitzers, and marched direct for Devil's Lake, where LITTLE CROW had been some months earlier, but where he had not been for some time.

COOK, after leading his column as far as Randall, had been superseded by ALFRED SULLY, a regular officer of excellent repute, who had been made a colonel of Minnesotá infantry, and promoted to a brigade in September, 1862, and SULLY, with 2,000 cavalry and 325 infantry, left Randall about the same time for Fort Pierre, which he had fixed upon as the site for a depot of supplies. SULLY's troops were made up from the Forty-first Iowa Infantry (mounted), the Sixth Iowa Cavalry and one company of the Seventh, the Second Nebraska Cavalry, two companies of Dakota cavalry and a detach-

ment of the Thirtieth Wisconsin; SIBLEY had the Sixth, Seventh, Eighth, Ninth and Tenth Minnesota Infantry, the First Minnesota Mounted Rangers and the Third Minnesota Battery, 2,800 all told, most of them raw levies, indifferently equipped and hastily organized. SIBLEY had begged for a stronger force and more cavalry, insisting that the Indians outnumbered him, were well mounted, and a formidable foe at all times; were doubly so under the present conditions. POPE was surprised at this timidity; he had never known so large a body of troops having been assembled for Indian operations; in fact, it was as large as one-half the old army before the war. So far from having too little force he thought SIBLEY had more troops than he needed; he outnumbered the Indians many times. SULLY's slow movements and deliberation were equally amazing to POPE. He is surprised and disappointed at his delay, and sees no excuse for it. It is painful for him to find fault, but he is driven to it. The spring has opened and passed; summer is well advanced; June and July have gone, and August nearly so, before anything has been done toward crushing the insignificant force under LITTLE CROW.

The truth was, the task that had been assigned to SIBLEY and SULLY was no uncommon one. No such concentration of force had ever been made by the savages of North America, as that which confronted us on the plains of Dakota in the summer of 1863. The remnant of the bands who escaped with LITTLE CROW, themselves the most daring and merciless of their tribes, had successively visited the Sissetons, the Cut-heads, the Yanktons, and finally the Chank-ton-ais, the most powerful band of the Dakotas, and together with nearly every young warrior of all these tribes had formed a camp of nearly, if not quite, 10,000 fighting men and 15,000 to 20,000 horses. These savage warriors of the plains had in the great majority never been met in battle by American soldiers. A few of the old men could remember HARNEY and Ash Hollow, but their tales were not believed. They had boasted that no hostile army, however numerous, would dare set foot upon the soil of Dakota, of which they claimed to be the undisputed masters. General POPE had been badly informed. Had SIBLEY moved when he had expected him to do so he would have undoubtedly been annihilated. Had SULLY cut away from his wagons early in July, as POPE had directed, he would never have needed them again. As it was, nothing more strategic than a combination of fortuitous circumstances, saved both columns from crushing defeat.

## SIBLEY CROSSES DAKOTA.

SIBLEY found, as he had expected, that there were no Indians at Devil's Lake. With 1,400 infantry and 500 cavalry, he left Camp Atkinson on the 21st of July and moved west-southwest to the James, crossed the Grand Coteau and made for the Missouri. A line drawn west by south from the present town of Minnewaukon in Benson County, to Bismarck, will closely follow the route of SIBLEY's column in 1863. On the 24th he ran into a party of some 1,000 to 1,500 Indians on the prairie near a salt lake where he was about to make camp, and without giving him time to prepare they were upon him. His guns were loaded with spherical case and shrapnel and poured into the yelling column of painted demons, and a gallant charge won him the battle of Big Mound. Two days later he repeated the tactics of Dead Buffalo Lake, and on the 28th fought the battle of Stony Lake, which won him his brevet, and drove the enemy across the Missouri in the direction of the Black Hills. SIBLEY went into camp on Apple Creek at a point about three miles below the present site of Bismarck, still known as Burnt Boat Island, and there waited ten days for SULLY. He had made a march of more than 600 miles, in a season of fierce heat and unprecedented drought, routed the enemy in three engagements and driven him across the Missouri. Although SIBLEY's description of his route would no doubt be interesting reading for the good people who have since found delightful homes in that very section, a paragraph must suffice.

"The region traversed by my column between the first crossing of Cheyenne River and the Coteau of the Missouri, is for the most part uninhabitable. If the devil were permitted to select a residence upon the earth, he would probably choose this particular district for an abode, with the redskins' murdering and plundering bands as his ready ministers, to verify by their ruthless deeds his diabolical hate to all who belong to a Christian race. Through this vast desert, lakes fair to the eye abound, but generally their waters are strongly alkaline or intensely bitter and brackish. The valleys between them frequently reek with sulphurous and other disagreeable vapors. The heat was so intolerable that the earth was like a heated furnace, and the breezes that swept along its surface were as scorching and suffocating as the famed Sirocco. Yet, through all these difficulties, men and animals toiled on until the objects of the expedition were accomplished."

Failing to learn anything of SULLY's whereabouts, and deeming it inadvisable to follow the Indians into the Black Hills, which, from

all accounts, were something infinitely worse than the country he had just traversed, he lost no time in returning to Minnesota, leaving the unfinished task to SULLY, who, he had no doubt, was near at hand with fresh and well-mounted troops. SIBLEY had accomplished all that was possible for him, and more than POPE had any right to expect. His men were all Minnesota farmers, willing to defend their own State, but under no obligations to spend the fall chasing Indians across the continent, while their own crops were waiting to be harvested. SIBLEY professed to believe that by his three insignificant victories he had broken the back of the insurrection. As a matter of fact, he had merely scratched its epidermis; for as soon as his back was turned toward home, the Indians recrossed the Missouri, and in a week were back on their old hunting grounds, having met and massacred a party of twenty-four men and women on their way.

#### SULLY AT FORT PIERRE.

SULLY had not been able to get away from Sioux City as soon as expected. The Sixth Iowa Cavalry had left on the 18th of May and established the depot at Fort Pierre as early as the 4th of June, but it was sixty days later before the entire expedition had assembled. General SULLY, in person, had left Sioux City on the 18th of June, and Fort Randall on the 10th of July, with a column of about 1,200 cavalry, 325 infantry and 120 wagons. His orders were to follow up the Missouri to the point nearest to Devil's Lake, where the Indians were supposed to be concentrated, and then to cross the country to cut off the retreat of the Indians, who by that time it was expected SIBLEY would be driving toward the Missouri. At the same time, in order to quiet the apprehensions of the people of Nebraska, a portion of his column was to move up the south side of the Missouri, joining the main body at the point of departure. SULLY was rationed for four months, his rations being carried on steamboats, which accompanied him up the river. Having reached the point of departure, he was to load his rations on his wagons, cut loose from his base, and move toward Devil's Lake with the utmost celerity. To POPE, at Milwaukee, these plans appeared so simple and feasible, that in his letters to General HALLECK he already felicitated himself on their happy accomplishment, and inquired what he should do with the Indians after he had corralled them.

From Randall to the mouth of the Little Cheyenne, which SULLY

had fixed upon as the point where he would leave the river, is a trifle under three hundred miles by water, and from fifty to sixty more by land. With his troops on both sides of the river, and impeded by heavy roads, with mud to the hubs of his teams, his progress was naturally restricted to the pace of his infantry, so that it was the 25th of July before he reached Fort Pierre, where his advance had been waiting since the 4th of June.

The point at which SULLY established his depot was on the left bank opposite Lost Island, at the old trading post that had been built by LAFRAMBOISE in 1857. The "fort" stood on the bluff, several hundred feet from the underbrush which lined the course of the river, in the midst of a plain that was absolutely barren of vegetation, even of the short grass that covers everything elsewhere in that section. The establishment comprised a store and storekeeper's house and a long building about 50 x 20, then occupied by one company of the Forty-first Iowa Infantry, the whole surrounded by cottonwood pickets standing about twelve feet out of ground and sunk to a depth of three or four, the usual bastion in the form of block-houses at diagonal corners. SULLY used the enclosure to store some of his supplies; there was very little room for them there, and he decided to leave the bulk of them on board the boats. The Sixth Iowa Cavalry made their camp on the river bottom under the bluff below the fort, and the Second Nebraska above it. He also left a company of the Seventh Iowa at the site of old Fort Pierre, three miles below.

The expedition moved out of the camp at Fort Pierre on the 14th of August, with a troop of cavalry in the advance, followed by the General and his staff and escort (which at this time was "I," of the Seventh Iowa Cavalry), a battery of five mountain howitzers, his wagon train, flanked by the Second Nebraska on the left and the Sixth Iowa on the right, the ambulances and rear guard. Two days later he reached the mouth of the Little Cheyenne, when he was compelled to wait for his rations, which had started on the *Belle Peoria* on the 12th, but had been delayed on account of low water. The steamboat arrived on the 19th, but a severe hail storm on the 20th stampeded his animals and destroyed all the rations that had been loaded into the wagons, besides soaking the roads and rendering travel almost impossible. He managed to get away on the afternoon of the 21st and followed up the Little Cheyenne as far as Bois Cache. Here he left the river and crossed the prairie to the foot of Long Lake, where he first heard that SIBLEY had finished his campaign and returned to Minnesota. This was anything but encour-

aging, but there was nothing to do but push ahead. On the 3d of September his scouts reported an Indian encampment a few miles in advance of the column, which turned out to be a portion of the party that had been chased across the Missouri by SIBLEY and had returned along his trail and located themselves in fancied security in the ravines around Long Lake. SULLY reports that the party numbered not less than 1,500, including Santees, Cut-heads, Yanktonais, Blackfeet and Uncapapas. He had ten miles to go to reach them, and although the distance was covered at a gallop, and his troops engaged at a dozen points, the enemy had plenty of time to scatter, and night coming on, he was compelled to abandon the pursuit. This, SULLY calls the battle of White Stone Hill, and it happened in sight of a hill on the open prairie near the headwaters of Elm Creek and about fifteen miles west of the James River. He lost one officer and seventeen men killed, one officer and thirty-four men wounded, and thinks he must have killed fully one hundred of the Indians; his prisoners included thirty-two men and one hundred and twenty-four women.

#### THE CAMPAIGN ENDED.

Ascertaining from his scouts that the enemy had vanished, and finding that his rations were barely sufficient to enable him by rapid marches to reach Fort Pierre, he took up his return march on the 6th of September, and finding his boats waiting at the mouth of the Little Cheyenne, he loaded his wagons and wounded and returned along the river road to Fort Pierre, where he arrived on the 14th, and went into winter camp. And this ended the Sioux campaign of 1863.

POPE had written SULLY most impatiently on the 25th of August: "It is painful for me to find fault," he writes, "nor do I desire to say what is unpleasant, but I feel bound to tell you frankly that your movements have greatly disappointed me, and I can find no satisfactory explanation of them. As soon as you receive this letter you will please cross to the south side of the Missouri, and having loaded your wagons with provisions and ammunition and such medical supplies as are absolutely needed, you will make a thorough campaign in Nebraska, proceeding as far to the west and northwest as possible before the winter overtakes you. It is desirable that some cavalry force be stationed this winter at Fort Pierre, or in that neighborhood, and provision should be made accordingly. You will please send the necessary orders to the proper officer of your district

for this purpose. Your command will occupy Fort Pierre or the neighborhood, Fort Randall and Sioux City for the winter, as also such points to the east of Sioux City as will effectually secure the settlements in Dakota and the border settlements of Iowa."

And again, on the 31st of that month, he writes that he had intended to say "Dakota" in his letter of the 25th instead of Nebraska. "It is my purpose," he adds, "that you move from Fort Pierre to the Black Hills, and thence north and northwest as far as practicable before the cold weather begins. These movements, as far as their direction is concerned, will depend, of course, upon the locality of the hostile Indians, but it is your special mission to deal finally, if possible, with the hostile Sioux driven across the Missouri River by General SIBLEY, and to prevent in all events their return to the borders of Minnesota in any large force. If you follow them and press them closely they will, no doubt, in their present destitute condition, seek to make terms with you."

He cannot leave the subject, however, without again expressing his opinion of SULLY's procrastination: "Your presence on the upper Missouri in time to have coöperated with General SIBLEY would probably have ended Indian troubles, by destroying or capturing the whole body of Indians which fought General SIBLEY, but your failure to be in proper position at the proper time, however unavoidable, renders it necessary that you should prosecute with all vigor and dispatch the campaign I have marked out for you."

#### FORT SULLY BUILT.

By the time SULLY received these dispatches he had finished his campaign and was settling his command for the winter. Whatever he may have thought of POPE's opinions and rebukes he neglected to put on record. Those who recall the choice vocabulary of expletives which General SULLY always carried about with him, will have no difficulty in supplying the link that must be forever missing to this narrative. In looking about for the best point to establish his post he fixed upon Farm Island, about midway between old Fort Pierre and old Fort George; in fine, at the very point where General HARNEY had posted SULLY himself when a captain of the Second Infantry in 1857, and to whom, no doubt, it recalled agreeable memories. There is not much to be said for it from an architectural point of view. It was built of logs, as indeed was everything else of the nature of shelter in that section; a few buildings to store the



equipment and rations and cover the heads of four companies; a stockade of cottonwood logs; a block-house, with port holes for the howitzers. On the 13th day of October it was pronounced ready for a company, and its garrison marched in; headquarters and three companies of the Thirtieth Wisconsin; three companies of the Sixth and three of the Seventh Iowa Cavalry, all under the command of Lieutenant-Colonel E. M. BARTLETT, of the Thirtieth Wisconsin, who, in his order assuming the command, announces that the post is to be known as Fort Sully, "in compliment to our brave commander, Brigadier-General ALFRED SULLY, U. S. Volunteers, now commanding the District of Iowa and Dakota." Again are we indebted to Sergeant DRIPPS for a glimpse of the first Fort Sully, and this is how it looked to him in November, 1863:

"In conclusion, I will just add a word of description in regard to Fort Sully and the winter quarters of our regiment, and close. Sully is situated on a plain or bottom of the Missouri River, on the east side, about eighty rods from the river. It is opposite or a little below Farm Island. It is built on two sides, east and west, with barracks; on the north and south with pickets. The buildings are of cottonwood logs, unhewn, and are about seven or eight feet high, covered over with logs and brush and then earth thrown over them. The pickets are the same material, set into the ground about three feet, standing out some twelve feet above ground. The fort is 270 feet square, and there are bastions on the southeast and northwest corners, in which are placed the cannon for the defense of the fort. This is pretty well fixed for defense, and cannot be taken very easily by the Indians, and is a good place for defense. Such is the fort that we helped build last summer, taking a great deal of time and labor, and which was by some set down as sheer folly. But be that as it may, it will be a memorial of the labors of the Indian expedition under General SULLY."

It remains to dispose of the balance of SULLY's troops for the winter of 1863-4, a winter that has gone into meteorological history as one of the severest that ever visited Dakota. The Second Nebraska Cavalry, being nine months' men, had reached the end of their enlistment by the time of the return of the expedition, and had been sent home to be mustered out; Company "K," of the Sixth Iowa Cavalry, was stationed at Fort Thompson, at Crow Creek; Companies "A," "D," "G" and "L," at Fort Randall; Company "M," at Vermillion; Company "I," at Spirit Lake; Company "F," at Tacketts; while Companies "C," "B," "E" and "H," with "I," of the Seventh, accompanied General SULLY to Sioux City. TRIPP'S

troop of Dakota cavalry went into camp opposite Fort Randall, and MINER's troop watched the reserve at Yankton.

As for old Fort Pierre, it had again lapsed into the mere trading-post for which it had been erected. All the military supplies that had been stored at that point had been removed to Fort Sully, and this latter post now became the base of future military operations in that section. And here we leave Fort Pierre, not because its story has been exhausted, but rather that the latter chapters of its history belong to the civil development of the Territory. We are not presuming to write the history of Dakota, though the abundance of material is such as to tempt the historian, nor of the campaigns by which the Sioux were finally convinced of the utter futility of resistance, and thrashed into submission. It would be interesting to watch the disappearance of the old trading-house; the coming of the surveyor; the land agent; the tax collector; the town meeting, and all the various processes of evolution through which a thousand frontier posts have been transformed into the towns and cities that dot the plains of America from ocean to ocean. But as KIPLING would say—that is another story.

## A NEW TEST FOR GLANDERS.\*

BY CAPTAIN FREDERICK S. FOLTZ, SECOND CAVALRY.

I HAVE twice been in a quandary about cases which had every appearance of glanders, as far as any one not an expert could determine from books, and I would have given a great deal could I have then obtained in a few days a test by which I could have determined that the discharge that was worrying us so much was not laden with germs deadly to ourselves as well as to our mounts.

In one case at Fort Colville my troop lost fourteen horses from what the veterinary sent to investigate pronounced to be a form of glanders (such as is reported in India) where the effect of altitude modifies the virulence of the disease.

### MALLEINE.

*A New Means of Identifying Glanders.*—(Gathered from the French of the *Journal Militaire*.) In this official journal there is published the "Instructions and regulations on the use of malleine and the measure to be taken in the care of glanders," and these instructions are followed by a history of the experiments which led to the promulgation of the regulations.

Malleine is an extract obtained by cultivation, sterilization and concentration from the bacillus of glanders. It can be bought of the Pasteur Institute in Paris, in the form of a fluid, which will preserve its value for several months (the instructions say for a year) if kept corked and protected from light and heat. The manner of

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\*This essay was forwarded under existing regulation to the Military Information Division of the Adjutant-General's Office, and is published in the JOURNAL OF THE CAVALRY ASSOCIATION by permission of the Adjutant-General. The publication of the essay is not to be understood as a mark of official sanction of the opinions expressed therein, the author being alone responsible for the views set forth in his paper.

its preparation is said to be such as to exclude all possibility of inoculating with glanders by its use. It is administered by hypodermic injection of diluted extract into the subcutaneous tissues of the neck midway between the windpipe and the jugular vein.

Experiments in Russia, in 1891, showed that malleine injected as above would enable certain cases of glanders, which otherwise could not be defined, to be definitely diagnosed.

Glanders appearing in 1892 at the remount depot of Montoire, all the horses at the depot were tested by the use of malleine by a specially appointed commission. The conclusions of this commission were somewhat confused, due to the fact that horses established as sound by the test were found, on being killed for examination, to have glanderous tubercles in their lungs. Two members of the commission advanced the theory that these animals had passed the malleine test without showing the reaction betraying glanders, because they had recovered from the glanderous lesions and that the tubercles found no longer contained living bacilli of glanders. This daring hypothesis was subsequently verified. These eleven animals, having been taken by chance from among one hundred and twenty-five animals that had showed no reaction under malleine, it may be assumed that the remaining ninety four must have been similarly infected, and that at some time the whole herd was glanderous. That the whole herd of two hundred and thirty-three animals did not show glanderous reaction, is due to the fact that for several weeks prior to the experiment, these horses among whom glanders had existed unsuspected for five months, had been picketed outside. The youth of the animals, the abandonment of infected places, rigorous individual isolation, suppression of all new contamination, stabling in the open air, and good food, had already allowed some of the animals to recover from the few tubercles they had in their lungs.

In further proof of this, the number of animals upon which the malleine reacted, continued to decrease until finally, after five or six months of picketing, seventy-eight horses which the first malleine test had proved infected were sent to regiments, and not one of them has since shown any alarming symptom.

Similar facts were observed in Russia in 1893; out of six hundred and fifty-eight horses, the test showed only two hundred and ninety sound, but after several months of surveillance a few only were killed, and the remainder returning to service showed thereafter no symptom of glanders. Heretofore it has been held that glanders was incurable; horses of a glandered herd that were finally returned to duty, were held never to have been infected. This was

a perfect dogma, which but two members of the Montoire Commission had the courage to attack. Their position has been fully sustained by subsequent experiment.

Glanders can be communicated in many ways. The glanderous discharge may be deposited upon a sore or scratch; it may result from the rubbing of an infected sponge upon a mucous membrane, even though this membrane be not broken; from the surgical use of an instrument soiled with pus, etc., etc., but it is especially through the digestive organs that glanders is propagated. It is sufficient if we give a sound horse a small quantity of virus, culture, discharge or pus with his food or drink; he will be glanderous in a few days. The malleine, which had no effect in health, will now give reaction, and tubercles will be found in the lungs. If the quantity of virus given was very small, the animal, with care, will throw it off and recover.

These experiments show the danger of stables when horses from everywhere succeed each other in the stalls where carelessly kept racks and mangers and common watering troughs favor the spread of infection.

*Action of Malleine on Glanderous Animals.*—In glanderous horses, the sub-cutaneous injection of one-quarter cubic centimeter of concentrated malleine (or two and one-half cubic centimeters of the diluted preparation) produces a hot, painful lump at the point of injection. This lump forms in a few hours, and varies from the size of the hand to that of a small loaf; from this lump sinuous extensions lead to the neighboring glands. When the injection is made aseptically, there is no suppuration; the tumor grows for twenty-four hours or so, and after two or three days slowly decreases, to disappear after six days.

The appearance of this tumor is accompanied in variable degree by dejection, muscular trembling, the face is drawn, the coat staring, appetite gone; if taken out, the animal shows great prostration, stupor; the most difficult horse is absolutely tractable. Usually, the movement of the leg nearest to the tumor is difficult and painful.

The above phenomena constitute the organic reaction which is never entirely absent. On the other hand the thermal reaction is never absent, the temperature of the animal rises from 1.5 centigrade to 2.5 centigrade, reaching its maximum about the eleventh hour after injection.

It is important to note that these conditions in glanderous horses persist a long time; there remains after twenty-four, thirty-six, or

forty-eight hours even, swelling, prostration and a notable elevation of temperature.

When a horse under the influence of malleine has shown both the organic and thermic reaction, it can be affirmed that he is affected with glanderous lesions.

In healthy animals, malleine produces no reaction, the temperature remains normal, a small tumor appears, but vanishes in twenty-four to thirty hours; appetite and spirits are unaffected.

When, therefore, the action of malleine provokes no reaction either organic or thermic, we can affirm that the horse is not glandered, in spite of any symptoms to the contrary.

Ulcers, enlarged glands, pits in the nasal cavities, foul discharges, can thus be rapidly and certainly distinguished from similar affections due to glanders.

The Ministry of War has consequently laid down the following rules:

#### REGULATIONS.

##### A. *General Principles.*

ARTICLE 1. The most complete liberty of initiative is left to the commanding officers of troops and stations, assisted by their boards of survey, to take the measures that are urgent and necessary in case of glanders.

ARTICLE 2. Every animal clinically glandered is immediately destroyed.

As soon as a case of glanders is proven, all animals that have been in the same stable are immediately submitted to malleine. His two stall neighbors are isolated as suspects, but no other change will be made in the stabling. All mingling of the horses of platoons or batteries or in the order of horses in teams, whether in daily exercises, or for maneuvers, is forbidden.

ARTICLE 3. After the test the animals are divided into three groups: (a) Those who have suffered no reaction, organic or thermic, sound animals; (b) Those whose temperature has risen more than one degree, but with little or no organic reaction; (c) Those whose temperature has risen one and a half degrees or more, and have shown organic reaction.

ARTICLE 4. These three groups are rigorously isolated from each other, with special attendants, and special equipments, halters, brushes, pails, etc., set apart for their use.

The animals of the first group will preserve their places in the stable and take part in the service of their troop or battery. They undergo a second test a month after the first, so as to be certain that they had no germ of glanders at the time of the first test.

The animals of groups c and b are suspects; in different degrees they undergo further tests. Those of group c will be destroyed

only upon a second positive indication under the influence of malleine, being meanwhile individually isolated.

The animals of groups *b* and *c* will not be allowed in any stall but their own, nor will they drink at common watering places. At each monthly test, those of group *b*, which show complete reactions will pass to group *c*. Those who at two successive monthly tests show no reaction, thermic or organic, are declared sound and returned to ranks.

The animals of group *c*, who at two successive tests, a month apart, continue to show a complete reaction, without sensible improvement, must be destroyed even in the absence of any clinical indication of glanders.

Those who show besides the thermic and organic reaction any one of the clinical signs of glanders or farcy, will be destroyed without delay.

\* \* \* \* \*

ARTICLE 7. It is formally forbidden to submit a glandered animal or one suspected of glanders to any kind of medical treatment. In case of suspicion only, you are authorized to take steps destined to disclose the existence of glanders.

\* \* \* \* \*

Here follows in the order, a minute explanation of the technical work of inoculation with malleine.

\* \* \* \* \*

#### DISINFECTION.

1st. Partial or local disinfection, as where there is an isolated case, will include the places occupied by the glandered animal and his two neighbors, and will extend to the places of isolation of the suspects.

It will extend to all articles which are used about the animals or may come in contact with their mouths.

The use of a harsh brush is very essential to good disinfection, and it will be remembered that the glander microbe is one of the most delicate in existence (60° centigrade will destroy it), nor can it resist free dry air, which destroys its protecting covering of mucous.

#### STABLES.

The places to be disinfected will be brushed clean of dust and litter, which will be burnt; then washed freely with cold water, then with hot water containing disinfectant, scrubbing carefully all greasy or dirty surfaces, scraping freely when necessary. Two days later, gave a thorough coat of thick whitewash prepared just before using from quick lime. Coal tar will not be used on account of its sticky nature.

These places are to remain unoccupied for three days, or as long as possible. Watering troughs that may have been contaminated



are emptied, covered over, and are not used during the continuation of the disease. They will be cleaned carefully and washed with a five per cent. solution of commercial sulphuric acid, after which they will be again washed with water. All buckets, etc., will be similarly treated.

#### EQUIPMENTS, ETC.

With the exception of sponges used on contaminated horses, none of the grooming implements will be destroyed. These, together with the nose bag, will be immersed fifteen minutes in water, at 60° centigrade, containing five per cent. of cresyl or lysol, and then thoroughly dried in the open air.

In each stable will be one or several buckets of this cresyl solution three per cent., renewed daily, in which the trooper will wash his hands and sponge after grooming one horse and before passing to another.

Bridles, etc., are disinfected in the three per cent. solution. Saddles and other articles of equipment will not be disinfected unless cutaneous manifestations of glanders should appear.

#### GENERAL DISINFECTION.

When the epidemic is grave, several cases appearing at different points in a command, the disinfection may extend to all the stables of a troop or battery or regiment, or to all the stables of a station.

All horses will be put at the picket-line, standing there in exactly the order they occupied in stables.

The stables will be disinfected throughout, inside and out, excepting the roofing. The paving need not be removed, nor the walls scraped. Woodwork, if good, need not be destroyed.

For three days or more the stables will be left wide open before reoccupying.

All regulations in conflict with the above are abrogated.

By order of the Minister of War:

(Signed) ZURLINDEN.

Paris, September 20, 1895.

No useful result could be obtained by experimenting on healthy animals, as we should need the contrast between the effect produced upon them and that upon the infected animal, in order to verify the conclusions of the French investigators.

The bottle of malleine which I have had sent me contains one hundred doses, freshly prepared, from our military attaché, Major KELLOGG, at the Pasteur Institute, Paris. He forwarded it on January 22, 1896, and according to the circular accompanying it, will retain its qualities for several months.

## THE CAVALRY HORSE.

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BY MAJOR WILLIAM A. THOMPSON, U. S. ARMY.

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AFTER many years' service in the cavalry on our frontiers, from Texas, New Mexico and Arizona to our extreme northwestern border, I will give my experience with the various breeds of horses we have used, and state which class I have found to be the most reliable and durable under all circumstances. I will also give my opinion as to how they should be purchased, how treated after purchase, and how distributed.

In Texas, from 1865 to 1875, we used what might be called a mongrel, with the exception of a few well bred horses that had evidently originally come from Tennessee or Kentucky, received from a volunteer cavalry regiment that had been dismounted and mustered out of the service at San Antonio. After a few long and hard Indian scouts, these well bred horses were the only ones remaining of the original mount. We tried the Texas cow pony, but one scout rendered them unfit for service. The average weight of a cavalryman, fully armed and equipped for field service, is 225 pounds; as the cow pony weighs only 700 to 850 pounds, the proportion of dead weight to carry is too much for the frame. It should be four to one, *e. g.*, the horse should weigh four times more than the weight he carries. From 1875 to 1888 we were furnished horses purchased principally from the Kansas City and St. Louis markets. Those from the former were fairly good; those from the latter, a little better. We usually received these horses in lots of fifteen or twenty. In each of these lots we would probably find two or three desirable horses; the others should never have been bought for the cavalry service, as they all had Clydesdale blood, which stock is only fit for work horses. While in Arizona, an attempt was made to supply the deficiencies in our cavalry regiments there with California and Nevada ranch-bred horses. It was a complete failure, for the reason

that horses of this class have very little of the right kind of spirit and stamina to begin with, and by the time they are broken, that little is gone. And, in addition, as a class they are very vicious. The cavalry in the Department of Arizona was mounted upon Oregon horses, bred out of native mares by ordinary stallions of the work-horse build. These mares all had cayuse blood, and of all the dung-hill blood I ever came in contact with, they were the worst—no stamina and no intelligence.

There is no section of our country that can compare with southern New Mexico and Arizona, including the northern states of Mexico, for testing the staying qualities of both man and beast. During all of our many Indian scouts there it was the exception for a well bred horse to fail us. Some of our marches in that country were of the most trying kind, extraordinarily so; forty or fifty miles a day, under a hot broiling sun, through clouds of alkali dust, and no water frequently from the time of breaking camp until way into the night. And this not for one day only, but often repeated two or three days at a time, and sometimes longer. Aside from a business point of view, in buying for cavalry purposes this cold-blooded breed of horses there is a cruelty attached to it that is really pathetic, for the reason that on hard marches they are unable to keep up with the better bred horses, and become food for coyotes. I have followed up the trail of a cavalry command, and passed these poor creatures lying by the road with just strength enough to nicker as they heard the approach of a horse, and make a struggle to get up and follow; others dragging themselves along the trail, vainly trying to keep up with the command. As an illustration of how much greater power of endurance well bred horses have than the cold blooded, soon after the war General STANLEY turned over to his old troop, "H," Fourth Cavalry (that troop being his when he was a line officer), two thoroughbred horses, one to be ridden by the first sergeant and the other by the first duty sergeant of that troop. These two horses fared just the same in every respect as the other horses of the troop, which were common bred, and to my knowledge were in fine order for any service after the troop had been twice newly mounted.

The government would derive many advantages if it purchased only well bred horses for the cavalry: (1) it would be a great and true economy; (2) it would cause both officers and men to have a greater pride in their branch of the service; (3) it would cultivate an affection between that noble animal and his rider that would be mutual. It seems hard that our cavalry should be so poorly mounted,

when it is well known our country produces such fine blooded horses that European governments send their agents here to buy horses for their cavalry. I was able a few years ago while in England to visit Aldershot. I interested myself in the cavalry. I found there at that time the Fourteenth Hussars, and my recollection is, they had just returned from the Egyptian campaign. They were mounted upon beautiful horses, a beau ideal cavalry horse, not less than seven-eighths to thoroughbred, a delight both to look at and to ride. The contrast between them and our own cavalry horses baffles description. I had just left a troop of our horses in New Mexico. Mr. ARCHIBALD FORBES paid us a visit in New Mexico, and we turned out a squadron of our cavalry equipped for field service; he was very favorably impressed with the rapidity with which the command was made ready. Sometime after, he wrote an article giving his impressions and experiences in that country, in which he mentioned that incident. He spoke of us as appearing *tout ensemble*, like a command of Bashi Bazouks. I have no doubt we did, but mount even a Bashi Bazouk on a thoroughbred horse, and he will pass muster in any cavalry.

Most men can appreciate the good qualities of a horse they are obliged to ride, and it is a well known fact among cavalymen that when a man is mounted upon a well bred, intelligent horse, he will give it more care and attention than if he were mounted upon a mongrel. During the GERONIMO campaign my troop had made a long march, over fifty miles; we went into camp about 8 P. M., being very dark; we had been in the saddle since daylight. Not wishing to expose our position to the Indians, they being in the foothills of the mountains and we being in the valley, I ordered that no fires should be started. Some time after the camp had settled down for the night I saw flashes of light around me. Upon investigation I found several of my very good cavalymen crawling around on their hands and knees, striking matches to find the best grass, as good grazing was very scarce in that vicinity. It is unnecessary for me to remark that these men had fine, well bred horses. I may also add that the hard-gaited, cold-blooded horses were picketed by their riders without regard to the quality or quantity of grass within their reach.

There is no doubt but that the cavalry arm has lost many a man who would have been a credit to the army, and remained, had he not been mounted upon one of those hard-gaited, stupid, stumbling, dunghill horses. On the average Indian scout we have all had discomfort enough, without having it added to by being tortured daily

riding such a brute, and in addition the constant dread that the horse will give out entirely, which is a very common occurrence. In the blooded and well bred horse we have an animal of great courage, great endurance, and superior intelligence. In the mongrel, or cold-blooded horse, we find traits just the opposite. In a crisis it is quite as important to have intelligent horses as intelligent men. The opinion has been advanced by a few cavalry officers that the mongrel is good enough for our cavalry service. I have so often seen it demonstrated to the contrary, I am convinced they are in error. I cannot imagine why such a theory should be advanced, unless they are laboring under the impression that the well bred and thoroughbred can not rough it like common ranch-bred horse. Such a theory, however, can not be founded upon facts as a whole. The blooded animals can subsist upon the same food and rough it as well as the common bred horses, and, owing to their superior courage and intelligence, last much longer.

As the War Department under our present regime is making so many improvements in our army, it would seem but fair that the horse should come in for his share of attention. The first step towards accomplishing the object in view, is to abolish the practice of buying cavalry horses under contract. It is well known under that system now in vogue the government pays just about one-third more for each horse than they could be bought for if purchased in open market. As an example, I have had horses that cost the government \$135.00 that could have been bought easily for \$90.00, or \$80.00, or less even, in open market. In making the appropriation of money for the purchase of cavalry horses, could not Congress be prevailed upon to have the bill read, "in open market?" There have been thousands of dollars absolutely wasted, and are still being so, buying horses under the contract system.

My opinion is that it would be well to have a board detailed by the War Department, known as the "Army Horse Board," to consist of one or two cavalry officers, an officer of the Quartermaster's Department as disbursing officer, and a veterinary surgeon. This board should, under instructions and orders from the War Department through the Quartermaster-General of the army, expend all the money appropriated each year by Congress for the purchase of cavalry horses, taking either Louisville or Lexington, Kentucky, as a center, and using as a field the country within a radius of 500 miles, so as to take in Tennessee, Kentucky, southwestern Ohio, southern Indiana, southern Illinois and portions of Missouri. It is well known that in the section of country mentioned, it is and

has been the custom to breed saddle horses for years, and the board will find more well bred horses there suitable for cavalry purposes than can be found in any other section of our country, except certain portions of New York State. Before the board entered upon its duties, arrangements could be made to receive and care for the horses purchased. I would suggest Fort Riley, Kansas, for it is a large cavalry post, a nucleus for a cavalry school of instruction. The horses can be fed there very cheaply, and they would be properly cared for. The board could travel over the section of country mentioned, visit the different breeding farms, buy a good horse wherever they could find one, and when they had secured a carload or more, ship them there.

Great care should be exercised to commence with in handling and training these horses. Upon arrival, they should be treated as recruits, most carefully broken and trained at all gaits, accustomed to the trumpet calls, never instructed except by the trumpet calls, most thoroughly and carefully trained so they will be steady and easily handled under fire, charging and *mêlée* firing as well as volley, in fact be drilled in all the requirements a cavalry horse should be to be effective, so that when they are received in their regiments they will be ready for duty. The training of these horses should be in charge of officers and men of the cavalry arm who have a taste and talent for such work, and who will make it a specialty. A uniform system of training and drilling these horses could be devised by a board. As soon as a number, say 500 or less to commence with, have been drilled, let them be shipped to fill requisitions in the different cavalry regiments under a system that will mount a troop at a time in each regiment. In this way, in a few years our entire cavalry force would be well and uniformly mounted. If we can reduce the whole matter to a system, it would in time prove a great economy, and we would have our army supplied with cavalry officers, as well as non-commissioned officers and privates, who in time of war, could and would be of incalculable value in organizing volunteer cavalry. Of all branches of our army, the cavalry officer should be the most thoroughly competent and proficient in his profession. This is so very important from the fact that our national state troops are composed almost exclusively of infantry and artillery.

The Germans, realizing the great value of effective cavalry, have a perfect system of training their cavalry horses. Their principal school is at Hanover. At this school each regiment of cavalry is represented by one commissioned officer and three non-commissioned officers. This detail is changed yearly. In this way these officers

and non-commissioned officers are most thoroughly instructed in the principles of riding and training horses for the cavalry. They are sent back to their regiments, where they act as instructors at troop and squadron riding schools. They commence training their horses at the age of three years; they are trained and drilled for two years, and the horses that have not shown themselves to be well drilled, *i. e.*, are not steady under fire, restless in rank, etc., are continued at the school another year; if still a failure, they are sold. Each troop receives twelve or thirteen of these three-year-old horses. These horses are not allowed to be used at troop or squadron drill until after they have had two years training. This system of training their horses is uniform throughout the cavalry branch. To insure a perfect cohesion at all fast gaits, all men and horses are classified, first, second and third. The first sergeants of each troop, before the commencement of the yearly grand maneuvers, assign the men of their troops to ride horses according to their skill, *e. g.*, a first class man to a third class horse, a third class man to a first class horse, etc. The vast importance of this cohesion is fully realized by all German cavalry officers, and it is brought to such a state of perfection by their uniform system, and by a long and patient course of instruction. The secret of their success is this: they commence with horses in their colthood.

As Congress appropriates yearly about \$125,000 for the purchase of cavalry horses, the horse board could keep within that limit. After all of our cavalry regiments had once been mounted upon these superior horses, one-half of the sum at present appropriated yearly would be ample to supply any deficiency, as the lasting qualities of the well bred horses are so much greater than the cold-blooded. There would be no more need of transporting horses by rail when cavalry regiments exchanged from one department to another. The horses would thus remain and become acclimated to the different sections of our country. This would prove to be very beneficial, not only in an economic point of view, but for the horse, as horses are often seriously affected by a change of climate and food. It would give such great satisfaction to all cavalymen in our army to feel and know that an exchange from one department to another meant only to secure a mount equally as good as those they had left. After all our cavalry regiments had been mounted upon horses of this character, I venture the assertion that it will be the exception for a troop commander to ask for a remount short of twelve or fifteen years.

In buying cavalry horses the standard should never be, so far as



blood is concerned, less than half-blooded; age, two or three years. In my opinion a two-year-old is not too young to commence with, knowing the care they would receive. It is a well known fact among horsemen, that the first impressions and schooling a horse receives are the lasting ones. Under our present system of buying cavalry horses, from five to nine years old, we secure horses whose first schooling has been either the street car, wagon, plow, carriage, dray, and a few, very few saddle gaited, and seven-eighths of the work-horse build, and with a very few exceptions, all dunghill, or cold-blooded stock. The result is, we receive them in the troop direct from the market, and work faithfully to accomplish something that can not be done with horses of such an age and of so many builds and breeds, *i. e.*, secure a troop of horses that will have that cohesion necessary at first gaits, and be steady under fire. We can not eradicate or drill out of them their first impressions. If we start in with two- or three-year-old horses well bred, their first impressions will be the last ones; they will be what is so much desired—cavalry horses. A battle might be lost by attempting to charge with these cold-blooded five- or nine-year-olds, that lack courage and other requisites noted, when it might have been won had the horses been what cavalry horses should be.

Color should not be regarded so much as a mere matter of fancy as the general impression seems to be. I have had all colors in my different mounts, and I grade them for durability, amiability, and as to intelligence that can be found only in well bred horses, as follow: First class, greys, bays and roans. Bays: (1) dark bay with black points, (2) light bay. Second class, sorrels: (1) light, (2) chestnut. Third class, blacks. Blacks are the weakest of all colors. In hot climates, a black horse will change in color to a dirt brown, which must be a relief to the horse, for the absorption of heat is lessened. The percentage of blindness among black horses is remarkable. I had a platoon of blacks in my troop while serving in the Indian Territory, and my recollection is that in eighteen months I had eight condemned for blindness. The same thing was a frequent occurrence among my blacks while in Arizona. In studying over this matter, trying to find some reason for it, I have never been able to find a satisfactory one. As we fed nothing but corn in the Indian Territory, I thought it might be that kind of food that caused it, but as the same thing happened in Arizona where we fed only barley, it cannot be the feed. So it must be on account of the color. I do not want it understood that I consider a black horse unfit for cavalry service; I simply think it is the weakest of all colors.

Weight not less than 900 nor over 1,100 pounds, The requirements as specified by the Quartermaster-General's office, with a few exceptions, as to the general build of a horse to be bought for the cavalry, will always be found in the thoroughbred or well bred horse, seldom in any other.

I have in this article, rather imperfectly outlined a system for buying horses for our cavalry, how they should be treated and trained, etc., not going into details, for a board of officers could formulate and perfect them. My observation and experience in our cavalry have prompted the suggestions made. My efforts have been to assist in elevating our cavalry to a standard of perfection that would be in keeping with the advancement that military science is making in our own country and in Europe.

## FEEDING.\*

BY M. J. TREACY, VETERINARIAN EIGHTH CAVALRY.

THE principles which guide us in the feeding of animals are determined by the anatomical arrangement of their digestive apparatus, and the occupations they follow. Looking at this matter from a practical standpoint, a horse may be considered as a machine, out of which it is desired to obtain the greatest amount of work, at the smallest expense and the least risk.

The food given must meet the following requirements: It must be wholesome, abundant, sweet and clean, free from dust and adulterations, from fermentation and its results, from which arise toxins, moulds, and fungi of various kinds. Dusty grain or hay are not only injurious from these sources, but they are extremely indigestible, and act mechanically by inhalation, thus inducing heaves, coughs, and other respiratory troubles.

The hours of feeding must be regular, and the mode of preparation found by practical experience to be the best, adhered to, cleanliness in preparation, and administration, must be observed. I venture here to suggest that grain should be sieved, or carried in a sieve from the grain cart to the feed boxes, and well shaken "en route," or that the bottoms of the feed boxes be perforated, to allow the passage of dust through them.

Diseases arising from dietetic errors constitute the most important part of the practice of the veterinarian.

The feeding of the horses is determined by the nature of their work. The velocity with which this is performed must regulate the bulk of the food they receive. It is evident that severe work cannot be performed on a full stomach; this we know from our personal experience, for the pressure exerted on the respiratory organs and

\*A lecture delivered before the Fort Meade Lyceum.

the interference with the digestive functions, will occasion disease, colics, fermentation of food and its consequent gaseous generation, rupture of the stomach, and death.

It is certain that the food required by working horses should be compressed into a comparatively small nutritious bulk, otherwise too much time would be lost in abstracting from it the necessary nutriment. Give, therefore, food of a concentrated kind two hours before work, and withhold bulky food, as hay, until this is performed. The limited stomach of the horse suggests small and frequent meals.

Our horses in winter when there is no grazing suffer from cold, and over ten hours' fast, from morning till evening feed; two pounds of hay per horse, scattered in the corral about midday, would be much appreciated by them, and to use the horseman's phrase, "keep the cold out of their stomach."

The great capacity for water and the small stomach, explain the golden rule of watering before feed only, as it passes through the stomach and small intestines immediately to the "cæcum," or water-bowel, a *cul de sac* in man, familiarly known as the "vermiform appendix," but in the horse have a capacity of about twenty-five gallons. This bowel is about thirty feet posterior to the stomach; the water in passing carries with it the contents of the stomach and bowels previously eaten, and where they should have remained undisturbed for a few hours, and in addition, diluting the gastric and intestinal digestive juices.

The fermentable nature of the food points to the necessity for proper mastication and salivation. The inability to vomit warns us against large meals at all times, but more particularly when tired, cold, exhausted or sweating.

Many diseases of opposite character are the result of poor dietetic management. Heaves, coughs, and respiratory troubles from musty or dusty hay; founder or laminitis, from feeding too much grain in an exhausted state; and diabetes, from mouldy grain or weavily bran.

Horses performing slow labor are necessarily dieted differently from those doing fast work. Let it be of a laborious nature, however, be it in the hunting field or between the cart shafts, it cannot be performed comfortably on a full stomach.

During fast work the stomach must be practically empty. Horses should be fed two hours before they are required, and the food under those conditions be of concentrated nature, as oats.

After prolonged work or abstinence, or when exhausted, tired or sweaty, horses should be allowed to eat hay two hours, then watered

and fed grain in limited quantities. Under all conditions of fatigue let them eat hay. A tired or hot horse will greedily swallow several gallons of water, if permitted to do so, whilst the saliva secreted and swallowed, by eating a few pounds of hay would quench his thirst to such a degree that he will not drink as many quarts. Just put yourself in his place, and imagine the result of suddenly distending your stomach with food or cold water when tired and exhausted.

Regularity in feeding is the best preventative of intestinal diseases.

Horses doing fast work, as in the saddle or harness, should be given their bulky food after, and not before their work is done.

Bulk is essential to digestion; it is impossible to retain condition on concentrated food alone. The intestinal walls must be slightly distended to favor digestion and assimilation. Without this bulk, horses become tucked up and hollow in their flanks, and soon resort to those stable vices, "wind-sucking and cribbiting," etc. Sudden change of diet, from old to new grain or oats, or from one to the other must be avoided, as they are frequent sources of death. Young horses cannot be too carefully or gradually brought up to a full grain ration. The necessity of increasing or decreasing the grain ration to correspond with the amount of work performed, and the size of the horse is considered by all good horsemen imperative.

European cavalry ration their horses according to size, weight and work, but no horse doing ordinary work as ours, should receive less than our present ration.

Exhaustive experiments have shown that a horse of average size, and resting in his stable requires for his internal machinery alone nine pounds of oats and twelve pounds of hay, and this of good quality.

Bran once or twice a week is a valuable addition to the ration, and should be fed dry, and with grain in the ratio of one to eight or ten.

Horses should be confined to one article of diet no more than man.

A horse will live thirty or forty days without food, if sufficient water be supplied, but will survive only about ten days in the absence of the latter.

During the Franco-Prussian War, and the later English campaigns, horse biscuits, or cakes of concentrated food pressed into exceedingly small bulk, were successfully used, the bulky food being found en route if possible. These cakes were used by the soldiers

when other food was scarce, in fact this was reported as one of their drawbacks.

The horse has forty teeth, viz: twelve incisors, four canines and twenty-four molars with the frequent addition of two premolars, known familiarly as wolf-teeth. The presence of these two latter is said to be conducive of eye diseases. The incisors are twelve in number—six above and six below, and are used in cutting food. The use of the canine teeth, two above and two below, is said to be that of offense and defense; they are large in the stallion, and absent in the mare. The molars are twelve in each jaw, six on either side; they are grinding teeth. The horse carries his food into his mouth by means of his lips, cuts it with his incisors; it is passed to his molars by his tongue. The upper jaw is much wider than the lower one, and the teeth larger; owing to this fact, the teeth tables present an oblique and chisel-shaped arrangement, the upper ones become sharp on the outside, the lower ones on the inside, wounding the cheeks and tongue respectively.

This is an important clinical fact, sharp teeth giving rise to much suffering and trouble unless periodically remedied.

The horse's mouth presents an important study to the cavalryman, it being the means by which he is restrained by the application of the bit. Here is a bit formed of two side-pieces called the cheek-pieces, upper and lower; and a cross-piece, the biting, or mouth-piece, in the center of which is a bridge called the port or tongue freedom. The straight portions of the mouth-piece on each side of the port is called the bar-pieces or the bars.

Here is a horse's head and mouth. Here are the bars on which the bar-piece should partially or wholly rest, depending on their sharpness or sensitiveness. These bars occupy the interval between the molar and incisor teeth, called the interdental space. The space between the bars is known as the tongue channel, which is crossed by the port or tongue freedom of the bit.

The bars and tongue support the mouth-piece, the "port" and bars of which rest on the tongue and bars of the mouth more or less, according to the temperament of the horse, the bar pressure and "high port" in the lymphatic horse because his bars are broad and more or less insensitive. This bar pressure must be modified by tongue pressure and low port in the well-bred horse, for his bars are sharp and sensitive, suggesting a high port in the former and a low one in the latter animal. The port must be narrower than the tongue channel. It is impossible to apply our present bit without injury to the horse's mouth and lips, for its side or cheek pieces are

round instead of flat like its model, the German cavalry bit, thus allowing the lips to bulge over its sides and becoming pinched between these and the curb-strap. To remedy this serious defect, bits wider than the mouth transversely are resorted to, and as a result the port or tongue freedom is forced over one bar, irritating the horse and dragging the curb sideways, pinching the skin under it and wounding the bars.

A cavalry bit should have flat cheek-pieces at least half an inch in width, and then it would be found that  $4\frac{1}{2}$  or  $4\frac{3}{4}$ -inch bits would fit the mouth where we now use  $5\frac{1}{4}$  and  $5\frac{1}{2}$ -inch bits. The side pieces of the German cavalry bit, of which ours is a poor imitation or so-called improvement, are about three-quarters of an inch wide. The "S" shape of the lower cheek-pieces are not large enough to fulfill their object to prevent the horse from grasping them with his teeth.

The first essential in good biting is a close, comfortable, transverse fit. Without this there cannot be good results, and it is impossible to accomplish this with our last issue. There was no trouble of this kind with its predecessors, for the simple reason that they had flat sides, which kept the horse's lips in their proper place.

I now draw your attention to the chin or curb-groove. It is round and smooth, and will stand pressure fairly well immediately above it. However, the bones diverge and become sharp, more so in well bred horses. How many of our horses are bitted so that the curb-strap will remain in the curb-groove? Not many. Why? Because the bit instead of being at least half an inch from the angle sides of the lips, is forced up against them. Consequently the mouth-piece is not as it should be, opposite the curb-groove. With a snaffle and curb bit worn together, all these drawbacks cease.

The average soldier seems to have a weakness for saddling on the shoulder blades and buckling the bit as high as possible in the horse's mouth—two serious drawbacks to good saddling and biting.

Mastication is lateral and confined to one side until the salivary glands on that side cease to secrete, when the operation is transferred to the other side.

It takes a horse ten minutes to eat one pound of grain, and twenty minutes for one pound of hay. Feed boxes should be at least eighteen inches square, and I am inclined to think nearly as high as the horse's withers. I have stopped several horses from bolting or gorging their food by adopting high feed boxes. The food spread in a thin layer prevents a horse from gorging. Our present feed



boxes teach them to gormandise because it is heaped up into a small space.

The food of herbivore is inclosed in hard wood called cellulose. If this is not broken in mastication, it is swallowed whole, and acts as an irritant in its passage through the intestinal tract. The molar teeth wear away more rapidly than the incisors; if the latter did not grow downward and forward as the age advances the molars would fail to meet.

The horse's teeth continue to grow during life, consequently if a tooth fall out, the opposite one will continue to grow indefinitely, requiring periodical surgical interference.

Swallowing is not a mere gravitation of food or water down the gullet, but a complicated muscular act. Jugglers sometimes astonish their audience by drinking whilst standing on their heads. Grazing horses perform this feat naturally. A horse cannot breathe through his mouth; if his nostrils are stopped, he will suffocate.

Horses accustomed to being watered at a trough, drink slowly, painfully, and with much difficulty from shallow streams, and many refuse to slake their thirst under those conditions. The watering of any organization in the field should be a slow, systematic process, and regulated by the slowest drinking unit therein.

The stomach is rarely empty. Hay is not digested in this organ, but passes on to the bowels, being starchy food. Oats being a nitrogenous regimen, is digested in the stomach. It is in keeping with economy, common sense and physiology, to water, hay and grain horses in the order named. If grain is first fed, then hay; the latter by its bulk pushes the former out of the stomach before it is digested. It is evident to anyone that the small stomach cannot hold much hay.

Water after or during feeding washes the grain back thirty feet, to the cœcum or appendix. When a horse is first fed hay, for two hours it takes the keen edge off his appetite; he then eats his grain leisurely, masticating and salivating it thoroughly.

Any of you can see our horses led to the stable each evening, ravenous from ten hours' fast, and cold, gorge themselves by gulping down large mouthfuls of grain. Eating hay for two hours at least before grain, and large, high feed-boxes, are effectual preventatives of this wasteful habit, in addition to being fed a few pounds of hay at midday in the corral.

The capacity of the stomach is about eight quarts; only one-half of this space is digestive, the other half being merely a dilation of the gullet. Hay requires four times its bulk of saliva to

digest it. It is digested at the rate of ten pounds per hour. Different foods taken into the stomach together never mix, but arrange them in layers, in the order they arrive. Oats and corn should not be fed at one time, as the more indigestible food passes out too soon. Corn is not digested in the stomach, it being a starchy food; Oats is digested there, being a nitrogenous regimen.

Change a stable of poorly managed horses to common sense arrangements, and in a short time how different an appearance they show. Don't stick to a custom for no better reason than that "our great-grandfathers did it"—this is a progressive age.

To recapitulate: Water before feeding only, not for three hours after. Hay, two hours at least before grain, the latter scattered in wide, large feed-boxes, high up. When exhausted, tired or sweating, or under any such circumstances, let the horse eat hay for an hour or two before watering or feeding.

Feed small quantities of grain if exhausted or sick.

Salt always in reach; some horses want more salt than others—let them please themselves. Our horse's salt ration is not sufficient. The soldier, an omnivorous animal, gets a far greater salt ration than his horse, a herbivorous one. Carnivoræ won't eat salt, it is poison to them. Herbivoræ want it as a vital necessity.

Feeding wet bran in Dakota in winter, is feeding solid blocks of ice. Mixing it with water in a leaky cart or box, is allowing its nutritious parts to fall to the ground.

## MILITARY NOTES, 1876.

BY CAPTAIN DANIEL C. PEARSON, SECOND CAVALRY.

THE field of encounter—the arena, lay midway on east and west line between the Mississippi River and the shores of the Pacific, and embraced the following territory. The central northern part of Wyoming, the southeastern quarter of Montana, and the middle western and southwestern portions of the Dakotas. At the time in question, no railroad passed through this territory. Here, whatever was useful in forest, stream and mountain, or upon the prairie, was monopolized by the Indians. Here, that continued recession from the advancing, irresistible wave of a stronger race, which began in America four hundred years ago, had stranded a big bunch of nature's copper-colored children, who, instead of banding all together for mutual safety, were broken into hostile elements amongst themselves.

Strange perversity in human affairs; crowded to the wall by the whites, the long inherited hatred amongst these red men had sprinkled battlefields thickly over the territory hereinbefore described. In the westerly portion, were the Crows. To the east, the Sioux, Cheyennes, the Crees and Rees. Sioux affiliated with Cheyennes; Crows, Rees and Crees were friends. When events had ripened, under Providence, for the governing race to strike the weaker one more heavy blow, when the restrictions upon the autonomy of the latter had reached a point no longer to be endured, and when, in his own peculiar methods with respect to white settlers along the Pacific Railroad, to his south, and with respect to farmers and miners in the Black Hills, to his east, he made his protests plain not for the first time to the world—then it was that the two great neighboring military departments of the government, the Dakota and the Platte, took the field against the unfortunate Indians.

The Indians in arms were the Sioux and Cheyennes, the former in the larger numbers; the latter not excelled for bravery by any race of men, which accords with the fact that more Cheyennes met death on the field of battle than did Indians with whom they were allied. The number of Indians arrayed against the troops cannot be stated, and it is doubtful if the Indians themselves knew their own number. That they largely exceeded the troops, not counting squaws and children, was an undoubted fact. Those of us who had the fortune to see one of their old camping grounds, and likewise the trail of their combined numbers, must remember the barren, trodden earth, stripped of all vestige of vegetation, than which nothing could be more expressive of desolation, or more significant of the almost unprecedented multitudes of men, women, children and ponies who had preceded us in the occupancy of those places. Of course it will be understood that no trails of this description blazed the way for us generally throughout the campaign in question. Only when it suited their convenience, or when abundantly able to encounter the troops, or when comparatively near their point of concentration on the Little Horn, did the hostiles offer such signs of themselves.

That portion of the United States forces destined to come up with the concentrated Indian camp, and which had opportunity to know the most about the size, composition and numbers, paid dearly for that knowledge. I refer to the more than decimated Seventh Cavalry, and to those fatal days, the 25th and 26th of June. In the month of March preceding, the Department of the Platte sent forth ten troops of cavalry and two companies of infantry, with wagon train and pack mules. Debouching to the north from Fort Fetterman, Wyoming, this command for one week, during which it was favored with the brightest possible skies for the time of year, marched intact. Then the wagons and infantry were left in camp. The cavalry and packs were pushed out at the beginning of the second week, with rations and forage and blankets cut down to the lowest notch, leaving camp after dark one night. That night was the longest, without exception, that I ever passed. The most intense desire for sleep asserted itself, chiefly, no doubt, because sleep was among the impossibilities, and altogether out of the question. An officer comrade, to whom a night march was not so much of a novelty, remarked interrogatively to me, and as I thought with an unnecessary reach to his voice, that that was probably my first night march. At this date I do not mind admitting that it was. In that night one of the sudden changes of weather occurred for which Montana

is noted. A blizzard struck us, locked the streams up solid, and lay a carpet of snow. What success in escaping the observation of Indians had attended our night march, was threatened to be of no avail by our conspicuous trail in the snow. Our belief at the time, corroborated by subsequent events, was that the Indians just then were comfortably quartered in their tepees.

At daylight, whose coming that cloudy and snowy morning was greatly belated, we dropped down into a camp of ice and snow, with the thermometer twenty degrees below zero. This temperature held, night and day, for the following two weeks, at the close of which period we were back with our wagons. I will state that the ten troops of cavalry were commanded by a brigadier-general, with a colonel second in command. After the first week away from the wagons had passed, during which no signs of Indians appeared, two were one day suddenly observed riding rapidly away from us. A halt was immediately ordered. The brigadier-general sent forward at nightfall the colonel and six troops to take up the trail, remaining himself with the other four troops. It being my fortune also to remain with the latter, I know only from hearsay concerning the fate of the six troops that night, the next day, and the night following. An Indian village on the Powder River, commonly described as CRAZY HORSE's village, was attacked and destroyed by the six troops on the 7th of March. A large herd of ponies was captured, but fell again into the hands of the Indians. The cold, the reduced rations and bedding and forage, broken sleep, and the unaccustomed exposure, had seriously crippled both men and horses for active, vigorous work. But a severe blow had been inflicted upon the Indians. The return march to the wagons, and thence to Fort Fetterman, rounded out a month's absence from that post, and finished an expedition in which no one claimed or received much credit, although there was quite as much ground for the claim, undoubtedly, as has often sufficed to render men illustrious in Indian warfare.

The rank and file had borne well all the hardships of the expedition, but received scant credit. The subjugation of the northern hostiles had not been accomplished. A larger contract had been undertaken than had apparently been anticipated. Summer was coming, when the Indians were regarded as less vulnerable. The attack on Powder River had not sent them into the agencies, suing for peace. The prospect of a speedy and rich harvest of renown was far from encouraging. As if to make some amends, the colonel was court-martialed for destroying dried meats and robes in the Indian village, which "might have" otherwise been used by the

troops in further prosecution of the campaign; also for failing to hold on to the Indian ponies, which "might have" been substituted for exhausted cavalry horses; also for generally failing to secure all the fruits of victory.

This winter expedition from the Department of the Platte was followed in early summer by a second, from the same department, at which time, also, an expedition set out in the Department of Dakota. The total in the field, from first to last that summer, from the first named department was thirty-five companies of cavalry and infantry, with an aggregate of 1,512 officers and men. The total from the Department of Dakota was forty-one companies, with an aggregate of 1,853 officers and men. Crow, Ree and Cree Indians were allied with the Dakota column; Crows and Shoshones with the Platte column. These two columns were commanded in the field by their respective Department Commanders. The two expeditions set out from widely separated points, and with a very vague knowledge of each other's whereabouts, until in midsummer a most appalling disaster overtook the Seventh Regiment of Cavalry in the Dakota column. The disaster, commonly known as the "CUSTER massacre," was but the outcome of a brave and successful effort of the Indians to save themselves, their families and all they owned in this world from death and destruction. There they had congregated in self-defense; and there they did thoroughly the duty which devolves upon all men, when all they hold dear is threatened with destruction. Some concert of action then suggested itself, the first essay in this direction coming from the column which had experienced this crushing blow from the common enemy.

Let us go back from this particular date, June 25th and 26th, to the latter part of May, and again to Fort Fetterman, where the Platte column was outfitting. Below, and near at hand to the fort, swiftly ran the North Platte River, bank-full at that time of the year. The command was, with the exception of horses that could be made to swim, taken over on a ferry boat, which was propelled to and fro by presenting sides, alternately, obliquely to the current, with the help of ropes, blocks and pulleys operating upon a cable that was stretched from bank to bank. The process of swimming the horses was interesting, more particularly when it came to those of one troop which positively refused to take the water. With that mount, as was the case with all, the men of the troop formed a semi-circle about the horses, the ends of the circle resting at the water's edge, to force the horses into the river. The particular mount referred to were young and new to the service. They broke through

the line of men; they turned tail to the river; they sailed past the fort like the wind, and then they disappeared in the mountains southward, the most of them never to be recovered.

This column, having collected on the north bank of the river, was then inspected. As a result of this inspection, a car-load of the personal effects of officers and men had to be sent back to the fort, to be left in the quartermaster's storehouse. In fact, many of those effects were yet on the river bank as the column pulled out to the north. Every pound that could be dispensed with was left behind. Currycombs and brushes were not allowed to the cavalry. Clothing, blankets, and equipage were closely scanned, and reduced by an inflexible rule in the case of every individual. Herein the infantry suffered most. Many nights were spent by them hovering over camp-fires, while the cavalryman was sleeping well under the additional cover afforded by saddle blanket and another extra blanket, which was carried beneath the saddle in the daytime with no detriment to the horse.

With considerable dispatch, the first of our long series of marches began. The rule adopted was for the infantry to start ahead each morning at about 4 o'clock. The cavalry, their horses having grazed since daylight, between two and three hours later, by which arrangement, the infantry averaging two and a half miles an hour, got into camp with least fatigue, and the entire command arriving practically at the same time. Before the expedition came to an end the following October, the infantry had acquired splendid marching capacity, while the cavalry, cheated of its forage, was at a disadvantage by comparison.

The formation of camps habitually approximated to a circle. High points in the vicinity were occupied as lookouts. The main circle at night had an outer circle of bunches of men within earshot of one another, one man in each bunch constantly awake by turn, and all lying close to the ground with arms at hand. More than once during those months, was the wisdom of this method of guarding the command demonstrated. The theory was, that when one or more of our wily foes should reconnoiter us at night, not only should we have our cordon of sleepless men on the watch, but, this fact discovering itself to the unequalled eye and ear of the savage, the latter after noiseless contact at one point and another, and worst of all, finding himself between the two circles, would return to his starting point with all speed, lucky to escape a bullet.

It is said that we never know what a day may bring forth. Never was there a keener realization of the saying, than through-



out the period, from May to October, of which I write. Each night, as one's head lay down, sound and whole, on saddle if a cavalryman, or upon whatever pillow could be improvised if an infantryman, there was no certainty that that head would be sound and whole the next night; death, or starvation, or sickness, was almost constantly forced upon the contemplation. Perhaps the most trying factor was the very general state of uncertainty. In camp, the 8th of June, toward evening, the enemy without notice gave us a few volleys from an overlooking eminence. Two troops of cavalry charged up the declivity and drove them away. Some holes here and there in our canvas were all that was left to tell of the encounter. A circumstance in this camp is recalled which impressed upon all the necessity of careful handling of firearms. One of our men, upon taking off the belt to which his pistol was attached, tossed it upon the ground, fetching the pistol sharply on to a rock, discharging a cartridge into his body, and receiving his death wound. A very impressive burial service was had, and the grave was secured from savage disinterment by collecting above it, with teams of mules, immensely heavy rock.

Eight days later, the 16th of June, our command, stripped of tentage and other impedimenta, accompanied by Crows and Shoshones with four days' rations, our infantry mounted on our wagon mules, set out. On the morning of the second day, the 17th of June, our *antennae*, the Indian scouts, saw buffalo running, evidently pursued by somebody outside of our command. They also came upon hurriedly abandoned breakfasts of buffalo meat. And shortly they actually laid eyes upon their red brothers with whom they and we were at war. They lost no time in conveying the news to us. The news was electrifying in the extreme. When I say "electrifying," I use the most literally opposite word. The whole atmosphere—the air we breathed—became charged with intensest excitement. The scouts stripped. They frescoed their bodies. They vaulted onto their ponies. With rifle in one hand and coiled end of lariat in the other, they steered their ponies at a mad gallop, now in straight lines, now in circles, all the time uttering deafening, fiendish, confusing cries until, like a flash, off they go by ones and twos to square up old feuds. No one should pretend to be able to tell all that occurred that day on the upper Rosebud.

It subsequently transpired that upon that identical day the Dakota column was scouting within easy reaching distance of the Platte column upon this same Rosebud Creek. About this same date, also, it became known to the Dakota column almost exactly where the

hostiles had concentrated upon the Little Big Horn. Concert of action between the two columns at this time must certainly have produced more creditable results for the troops. In our 17th of June affair on the upper Rosebud, our Indian allies, of whom the Crows were in their own familiar country, proved of great assistance. The evidences we had of their wonderful eyesight were constantly with us. The Second Cavalry squadron was first in contact with the Indians. I recall the strange and unaccustomed sensation of that target practice in which the bullets whizzed thick and close to my firing point instead of safely away at the three, five and six hundred yard target butts near garrison. I recall, too, the fact that at one time more than my share of bullets, apparently, struck the ground near by, and that I afterward discovered that the motion of my horse had inverted my open cartridge box and pitched a large percentage of my cartridges upon the ground. Does it not rank high among comical events of this world to think of a soldier creating a battlefield all by himself, and being dismayed by the sound of his own bullets as he unconsciously fires them at the ground? I am not proud of the occurrence, and hasten attention to the fact that, yielding to contact with the Second Cavalry, seeking our left flank and rear, the enemy found themselves confronted with the rifles of the infantry. They then tried flanking the infantry, but found more cavalry coming up on the infantry left. Here the hottest part of the engagement took place. Here ten of our men were killed and twenty wounded. Here, on one part of the skirmish line, were recruits doing their first service. Here the enemy charged boldly into close quarters. One of the recruits handed an Indian his carbine in token of surrender. The Indian, acting with dispatch in such close proximity to our line, grasped the carbine, smashed the soldier's face with the stock, and then dashed away. For one on the ground, it was impossible to tell of the duration of that fight. Thoroughly convinced that our foes were in multitudes, although for the most part concealed from our sight—momentarily assured by Crow or Shoshone, who, with penetrating eye and gesticulating hand, indicated the hostiles, that never in the world were quite so many Indians assembled before—no conclusion was so apparent as our defeat.

Finally, orders came to move down the Rosebud to the supposed Indian village. Nine troops of cavalry were disengaged from the fight and started in that direction. Not to leave the dead of those troops behind, they were swung across saddles for their last ride, head down on one side and feet depending from the other, blouse

and trousers strained to parting above pommel and cante; with rollicking comrade—not so rollicking at heart—leading the dead trooper's horse among the rear twos. That was no time for moralizing or for tender sensibilities. The nine troops had rapidly passed some seven miles into the cañon, whither our Indian allies refused to go. At this point, an aide overtook us with an order to retire from the cañon by the quickest route. The reason stated by the commanding general in his report for countermanding the order for us to go down the cañon, was that he desired to use us elsewhere. The very evident fact to us was that we certainly would never have been of use elsewhere, except for that countermanding order. If of any immediate subsequent use on that day it was not apparent. Turning short to the left hand in the cañon, our path was up a steep, thickly wooded declivity. My part at that time was to be messenger to communicate directions to succeeding troops; to overtake the head of the column, and to be bearer of messages to the rear again until, breathless and leg-weary, as the ascent was too steep for riding, I was the last to clamber out of that cañon, fully persuaded that the whole Sioux nation was at my heels. Upon reaching the high and level ground there were the balance of the command and the wounded. In aiding the wounded much skill was manifested by our Indians. The first thing that struck me was the sight of our wounded prone upon the ground, in the hot summer sun, without protection. At the same time, there were the wounded of our friendly Indians with hastily constructed tripod and shelter over them. In all their treatment of the wounded, they displayed a certain skill that was born of familiarity with life and death contests.

And so here we were with two of our four days' rations gone, with which we had left our wagons. Two days' march from our wagon base of supplies, with just sufficient rations to return. We had not then learned the practical operation of going a week or more, with no rations at all. On the 19th day of June, however, we were back with our wagons, and made good connection that time, so far as rations were concerned. The remainder of June, the whole of July, and a few days in August were passed in inactivity, mostly, in camps skirting the northern base of the Big Horn Mountains. The wagons, with infantry escort, were sent to Fort Fetterman, then two hundred miles to our south, for more rations and for more troops. Meantime, camp was changed at intervals, from one point to another, from mountain stream to mountain stream, there being a succession of such at from about five to eight miles apart, all cool

and crystal, emerging from cañons opening northward from the Big Horn range.

About the 10th of July, the first news of the CUSTER fight, by way of Fort Fetterman, came to us by courier, three weeks after the event. The effect upon the command may be imagined. It dawned upon us that CUSTER and his men had met the fate in store for us had we followed up the gentlemen with whom we had the argument of bullets a week in advance of the CUSTER fight. The impression made upon our Commanding General, who had not been suspected of overrating the northern hostiles, was such that he immediately sent couriers back for more reinforcements, beyond those already ordered, before making another advance.

About this time, also, the memorable expedition was made, in which one of our regimental officers did distinguished and gallant service. The general belief prevailed that CUSTER's destroyers had moved up the Little Horn River, to a point west of us, and also near the Big Horn Mountains. To get information of them, the Commanding General desired his leading scouts to explore in that direction, but the scouts demurred to go alone. Accordingly Lieutenant SIBLEY and twenty-five picked men and horses were ordered to accompany the scouts. It is my opinion, with all deference to that of Captain SIBLEY, who certainly had the best opportunity for judging, that for purposes of observation the usual method in the Indian country of sending but one or two, or at the most three individuals, would have been better tactics. The circumstance which enabled Captain SIBLEY's party ever to return to us—not forgetting the courageous action and excellent judgment displayed—was their finding their way, after enforced abandonment of their horses, into the heavily wooded mountains, where the plains Indians with whom we were at war were loath to go. So far as the opposition to be expected from the enemy was concerned, they were in such warlike mood and equipment, as to render a detachment of twenty-five men a mere flea-bite for them. So I say that the rule of minimum vulnerability with maximum excellence of powers of observation should not have been departed from. I fail to find in published official records any allusion to this hazardous service of Lieutenant SIBLEY's detachment. It certainly deserved conspicuous and honorable mention, which it received, I am glad to say, in all other quarters. I congratulate the Captain that the Indian scalping knife, which he and his detachment so narrowly escaped, had nothing to do with the scanty field of operations for the tonsorial artist which the top of his head now presents.]

That was a most interesting day in camp when, toward evening, two infantrymen arrived with dispatches from the Dakota column, our first definite information of the whereabouts of that column, and also of the full details of the CUSTER fight. The Dakota was senior to the Platte commander. In these dispatches he waived his rank and offered to cooperate with the latter in any plan of operations he might have. About this time, also, orders were received from the Division Commander that the Platte column should join the other. A regiment of cavalry coming to our reinforcement early in August, a start was made to join the Dakota column. Abandoning the wagons which we were not to see again for two months, and stripped once more of everything that could be left behind, we emerged again to the north. In a few days, after crossing trails which denoted that our Indian foes had gone eastward in the direction of their agencies in a broken and scattered condition, the two columns came together, each at first mistaking the other for the enemy, and making dispositions accordingly. Junction was made on the historic Rosebud. There was tardy wisdom in uniting the two columns. The Dakota troops had abundant supplies, which had been facilitated by the navigation of the Yellowstone and Missouri Rivers. The Platte troops had been insufficiently and poorly supplied throughout.

If this difference between the two bodies of troops should be attributed to the difference in the means of transportation, the inquiry is suggested, Why should the Platte column have deliberately turned its back, as it did early in September, upon twenty days' forage and rations which the Dakota commander had conveniently placed for it? And in consequence of which action on the part of the Platte commander, the latter's men were almost starved to death; horses had to be abandoned by the hundreds, while other scores of horses, emaciated as they were, were made to simulate beef cattle for issue by the Subsistence Department. In fact, dry and tasteless horse meat straight, for days constituted the sole rations for the Platte column.

And so it was that the Dakota column was not permitted to continue its hospitable and generous provision for us which it showered upon us so long as we remained together. The joint command marched eastwardly, crossed Tongue and thence to Powder River where the latter empties into the Yellowstone. Our stay at the latter place was for about a week, during which time we were frequently drenched by night rains. Much skill was acquired in the selection and preparation of the spot of ground upon which we indi-

vidually slept, to avoid in particular the formation of rivers and pools of water during the night. In the absence of tents, and as late summer was blending with early autumn, the nights grew cold, and the rainy season was on. It would surprise the uninitiated to know what comfortable nightly shelter was had. Camping places at that time usually abounded in trees and bushes, from which small withes and saplings could be had for the framework. Six or eight withes, each sharpened at the heavier end and forced into the ground in two parallel rows at say two and a half feet asunder, the tapering ends brought together and interlaced, formed a support about three feet in height for a blanket, whose sides came to the ground and were fastened down with wooden pegs. A blanket so placed with reference to a man asleep on the ground at night was more efficacious, as a second blanket to the one which came next to the body, than if the man slept with both blankets next him, especially if it rained or snowed. One end of the semi-cylindrical tepee so constructed was closed by an overcoat, or a saddle blanket, or piece of shelter tent. Into the other open end you entered, head first, in a prone position, and gradually squirmed into your bed for the night—headquarters always in the saddle. It was while so reposing one night, that there came thunder, lightning, rain, hail, wind, in terrible violence, sounds and shapes—a wretched, unhappy, tormenting night. Lying flat on my back, with hands grasping and holding down the sides of my blanket roof with each access of violence to the storm, I was ashamed to have passed the night so comparatively comfortable when I learned of the general experience. The great majority were drowned out, and had absolutely no resource but to stand or sit in the water and mud till morning. All attempts to light pipes or firewood were out of the question. The expletives, the lamentations, the objurgations, the deep resentments and remonstrances against the fate of that night, have seldom been paralleled.

When the time arrived at which it had been foreordained that the two columns should separate, the commander of the Dakota column, who, being senior to the other brigadier supposed he had something to say on the subject, upon rising one morning was informed, to his amazement, that the Platte column had decamped—a most astonishing proceeding it has ever seemed. Without any pretense of courteous leave-taking, our Platte commander skipped out with his 1,500 men, one fine morning in the mud. The senior brigadier, who had been treated in this way, ordered up his horse, and with an escort of twenty-five men overtook the junior com-



mander at his first camp out from the Yellowstone, in order to have a mutual understanding as to the future movements of their respective commands. The Dakota column was to move east on the north bank of the Yellowstone; the Platte to the east, but along a line some distance to the south of the Yellowstone. At the mouth of Glendive Creek, on the Yellowstone, it was arranged to leave the twenty days' supplies, before referred to, for the Platte troops. In due time the latter reached their nearest points to these supplies. A march of forty miles would have reached them, and there were two days' rations on hand which would nicely have sufficed for the necessary two days' march, and little or no grain for the animals. A field officer interceded with the general commanding, that we should go for our supplies. The general commanding demurred, on the ground of uncertainty of there being any supplies, in spite of the promise of the Dakota commander. As a concession to the situation, our commander sent scouts to see if there were any supplies. The scouts returned and reported no supplies, notwithstanding that there were supplies at the appointed place, and as there was abundant subsequent testimony.

The march determined upon, as an alternative, with but two days' rations, led us further east and then south to the Black Hills, in Dakota, over a stretch of 200 miles. As we journeyed onward, I must not omit to mention the growing corn on a portion of our trail where the Seventh Cavalry had passed in early summer and dropped the seed corn from their wagons—a suggestive reminder of the changing fortune of the soldier's life. Early summer had been bright and bonny for them. Autumn now had come, and horses and riders had heard their last bugle call, had made their last march, and had paid the debt of nature far from home and friends.

But let us push on and see what was in store for us before the business of that season was over. There we were, with hard tack and bacon fast disappearing. Maps were constantly in requisition, to inform ourselves where we were, and where we were going. The maps gave most meagre information, barring distances, which were discouragingly plain and accurate in their formidable aggregation. Our march became an exploration under difficulties. Infantry began to receive reinforcements from the dismounted cavalry. The horses of the latter were shot at first, but later were simply abandoned along the trail to their fate. Excellent grazing abounded, but it being necessary to get to food for the men, delay for the recuperation of horses was not permissible. The superiority of grass-fed Indian ponies for rough and long-continued service has



often been mooted. Demonstration to the contrary was afforded us. Our Indians had two ponies apiece, some of them more. Each Indian had at least one led pony for riding, for a change. It became finally a pitiful spectacle to see those unshod, footsore, emaciated little beasts marching, day by day and side by side, with our cavalry horses, toward the latter part of the time the Indians remained with us, and at a period much in advance of the exhaustion of our horses.

One long stretch of our journey in those starvation days was over a treeless country with no fuel for warmth or cooking. Wild onions and cactus fruit were sparsely scattered here and there, and ministered triflingly to the pangs of hunger. The need at this time may be truly described as awful. In one place the trail had to be corduroyed with boxes of ammunition, there being absolutely nothing else at hand, and the threatened starvation of the command made the ammunition, which was unrecovered, an inconsiderable loss that was not taken into account. Saddles from abandoned horses accumulated beyond the capacity of the pack train, and so finally were burned in one big bonfire. The texture and odor of horse meat had become so familiar as the bill of fare for our two daily meals, as to generally alter the sensation customary in using them as saddle animals, besides suggesting an injustice in making them do double duty as food and transportation. It is a satisfaction for me to know that the chestnut sorrel I rode in those days, is to-day enjoying life in the blue-grass region of Kentucky.

Although the demands made upon that animal in those days of which I have been writing, in our own and in other cavalry regiments, were so excessive, it must be remembered that our men were subjected to corresponding hardships. I recall very vividly the lines in the horses' flanks, which sank deeper and deeper in as the period of trial was more and more drawn out. One troop in our whole twenty-five troops of cavalry had the credit and the distinction of not losing a single horse on that trip. In my possession is a letter from the captain of that troop, now a major upon the retired list. It is as follows:

"THE ARMY AND NAVY CLUB,  
"WASHINGTON, November 11, 1895.

"MY DEAR CAPTAIN:—It affords me pleasure to notice receipt of your esteemed favor of the 28th ult. I find it difficult to tell you how Troop 'B,' Fifth Cavalry, at the ending of the campaign of 1876 had not lost a single horse, when hundreds were left upon the trail by other commands. I have only this to say: My troop was in fine shape to enter the field when called to Dakota. I had few

recruits. Most of my men were in second and third enlistment, and we had passed through a long and arduous campaign in Arizona. My non-commissioned officers were capable and fit for higher positions. The men were never allowed to leave the ranks when marching, without the knowledge and consent of the troop commander, and then only on the most urgent circumstances. I made every trooper feel an ownership in his horse that was assigned to him. No other person could use the animal without his consent. In this way, I found my men often cutting grass with a pocket or other knife, in places where his horse could not get at, when grazing at the length of the lariat, to supplement his feed and perhaps give him a tidbit. I wish you were here, that we might go over the field again. I often meet men in the Club that were with us. Yours truly, MONTGOMERY."

The exhaustion of our command proceeded from bad to worse. Having reached the North Fork of the Grand River, Dakota, 150 men, mounted on the strongest horses, were sent forward, with orders to proceed as rapidly as possible to Deadwood for rations, starting at 7 o'clock on the evening of September 7th. Having gone eighteen miles, the detachment camped until morning, and then again took up the march, and in the afternoon of that day unexpectedly came upon an Indian village of thirty lodges. This village was destroyed and all it contained, excepting about five tons of dried meat, which eked out our rations of horse. Owing to the peculiar and not very choice way the Indians have in curing game, it is not, of course, a popular article of commerce. The main command arrived upon the scene before the destruction of the village was completed, and later, upon the day of arriving, was deployed in an immense skirmish line, making a circle about three or four miles in diameter, to meet the attack of the Indians, who had returned with reinforcements, and with the expectation of having only to contend with our first attacking body. The size of our firing line and its heavy fire was greatly more than a match for our foes, who permitted us to retire from the historic ground of Slim Buttes without serious damage to either party.

But few marches more sufficed to bring us to the point where we were met by rations and grain. Enterprising citizens also came up with wagon loads of breadstuffs, the average profits of which were not bad. It is true that starving men besieged the wagons, and caused a miraculous disappearance of loaves and cakes, the responsibility for which no man could find out. But then there were loaves upon loaves that brought a dollar each.

About this time a contractor's beef herd came in sight, and in a

surprisingly short time was killed, cooked and eaten. Five hearty meals a day was the rule for a long time. I am sure that gustatorial delights at DELMONICO's never equaled ours. It was not until the inner man was somewhat rehabilitated that the outer man received attention. Ragged, patched and worn-out coats, shirts and trousers had for a long time, without change, been the covering for the bent-over, hollow-cheeked, sunken-eyed men.

At the close of the last day's march of twenty-seven miles, in rain and mud, before getting rations, the number of stragglers who had not been physically able to keep up was 125. It became my duty to go back the following morning over the trail and pick up those men. One after another came along, with too evident signs of exhaustion and emaciation. To those who were on the point of utter exhaustion, I caused men of my detachment, one by one, to give up their horses. Some declared it was useless to go farther. I gave them the good news that they would find rations in camp. Then they had courage to go on, struggling still in the mud, bare-footed, with boots slung over their shoulders. By some merciful Providence, hostile Indians had not hovered upon our trail at that time. The slaughter of our weak and starving men would have been small glory to our arms.

Finding ourselves soon after this in Deadwood and Custer City, we had the pleasure of seeing our wagons once more, which had been sent to us by a detour. Tents seemed like palaces then. Camp bed and bedding, positive bliss. Ordinary necessities of life, real luxuries. The newspapers of Deadwood and Custer City spoke a hospitable welcome to us. It was a matter of regret, however, that from some source they had procured such unreliable information of our comrades of the Dakota column. Comparisons were made which were very erroneously intended for our gratification. The Dakota column was denominated the "rocking chair brigade." Contact with the Dakota column had been such a "serious hindrance" to the Platte commander. Had the Platte commander been left to himself, the Indians would all have been "wiped out;" and more such deplorably false and partisan reports were brought to the newspapers.

I regret that I am not equipped with the facts that would enable me to do a measure of justice to the medical department of our column. The services they rendered to the wounded, the sick and the exhausted would make a most instructive and interesting chapter. While the outdoor life tended, in the main, to the preservation of health, or at least counteracted largely the effects of poor

diet and of other untoward hygienic environment, there were cases of severe sickness, notably that of HUNTINGTON of our regiment, who was prostrated with fever, and was transported for days upon a travois constructed by men of his troop. Most skillful surgery was done in the case of another officer at Slim Buttes, whose right leg was amputated above the knee, in consequence of a shattering of the joint by a ball.

Prompt, faithful, skillful attendance was prominently characteristic of our medical officers, in keeping with the habitual efficiency of their department. Even to the unprofessional mind, their ingenious improvisation of substitutes for appliances necessarily absent in the field was interesting. Ready resource was in daily evidence. Copper cartridge shells, relieved of their deadly contents, their open ends stopped with wooden plugs, were transformed into very timely and useful receptacles for remedies constantly needed on the march. The infantry column has reason to remember the good doctor who lightened the day's burden often for many of its weak and famished men, by carrying as many rifles as could be fastened to either side of the pommel and cantle of his saddle; or, relinquishing his horse to some sick man, plodded on foot, although in the same worn and weak condition himself as was the majority of the command.

Of the ten officers of the Second Cavalry who were with the Platte column in the summer of 1876, three—NOYES, PEARSON and SIBLEY—are still with the regiment; six—DEWEES, WELLS, O'BRIEN, RAWOLLE, HUNTINGTON and KINGSBURY—sleep in the silent bivouac of the dead; one—SWIGERT—has been promoted out of the regiment.

I have two thoughts born of the experience of 1876. First, as to clothing: It should be warm without unduly cumbering the body. Rapid motions and good circulation of the blood are often seriously impeded by too great a load of clothing. Fur garments are indispensable. Second, as to food: Feed full rations to men and full forage to horses and mules. Condemn all unnecessary reduction and diminution in this regard as mal-administration in its worst form. The physical endurance, the good heart, and the nerve and muscle of the components of an army form its indispensable working capital, and should be prized somewhat as the miser does his treasure. It is a lamentable thing when a want of foresight, a jealous disposition, misguided judgment or selfish ambition sit at the helm. If for adequate object, and with good results, men are put to the test of their supreme abilities, they may be expected

to make light of hardship and privation. It is then that proud and heroic conduct may be confidently looked for. The bearing of these observations was made plain by the morale of the Platte column, the last days preceding the relief which came to us in the Black Hills. Discipline had become strained. A condition akin to mutiny was smouldering. Fortunately relief came to hand when it did!

Pack mules are a good means of transportation for small commands only, ill adapted for bulky loads, and too disproportionately expensive for loads that are solid and compact.

The best possible care of horses after taking the field, not to mention their neglect, will not atone for poor condition at starting. Good condition at starting, in spite of considerable neglect on the road, will enable horses to endure a wonderful amount of privation and hard work. Whatever benefits come from good grooming and systematic exercise, too much importance can hardly be attached to that good feeding which adds every pound possible of avoirdupois to the horse. The trip in question afforded apt and multiplied evidences of this, in the case of numerous horses observed by myself, in which the results of previous generous nutrition lasted to the close of the season. Shoe your horses. The proposition that horses need to be shod did not require demonstration. There has been much academic contention to the contrary, which I pronounce fanciful and useless. The necessity for horse-shoeing corresponds very well with its universality.

The soldier should remember that besides taking into account the chances of death or wounds from the enemy, which may or may not come, his capacity to endure cold, heat, hunger, loss of sleep, untimely and intimate exposure to rain, snow and mud; his ability to patiently await the developments of weeks and months of well or ill managed warfare; his faculty for rustling for himself and getting along with such aids as nature, and not the hand of man, will supply; and, finally, making it a rule, *to despair at nothing*—these are basic principles of his profession.

Field service is most excellent alternation with service in garrison. Each has a value peculiar to itself, and quite distinct from the other. It would not be easy to say in what proportions they should be mingled. The opinion is ventured, however, that if the time the soldier serves, in particular now that his enlistment is for but three years, were to be given up to but one of these kinds of service, the best interest of the individual, and of the government, would be secured by exclusive field service. In this latter service,

there is an almost infinity of experience. Take any veteran, and how apt he will be to tell you, touching his latest trip in the field, that some new problem, or some old problem in some new shape, had offered itself for solution. To aid in the realization of the truth of my proposition, let some of the factors of field service be enumerated—factor presenting such inter-relation that a change in one, kaleidoscopically changes the whole: The orders from a distance, under which a command is to operate; the methods of the man who happens to command; the personal equations of staff and other officers; the nature of the country in general; the nature of the country, as it varies from season to season; the condition of roads and trails which a twelve month is sufficient often to essentially alter; the kind of transportation, and its condition; the kind of camping places, and their condition; the different degrees of accessibility of supplies; the kind, the quantity and the frequency of water; the duration of daily marches, as affected by heat and cold and dust and mud. The liability of accidents to transportation, occurring at times when means of repair are near at hand, and at times when means of repairing are fifty or a hundred miles away; camping in bivouac, or camping in regular form, with all the appointments in the way of tentage and laid-out streets; acquainting one's self with men and localities; cultivating and strengthening the powers of the eye, the ear, and of the physique generally; cultivating the judgment; acquiring alertness with the particular avoidance of that inertia which is not the exclusive property of stationary bodies in the inanimate world; and when I add the complications ensuing from contact or the want of it, between commands having the same objective, as was the case in 1876, and when also we view the effects of contact with an enemy, the field of imagination can be very exhaustively occupied were we to specify actual and probable experiences. If any profession be accorded first place for aptly illustrating the proverb that experience is the best teacher—shall it not be our own?

## A FRENCH VIEW OF THE AMERICAN CAVALRY IN THE WAR OF SECESSION, 1861-1865.

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TRANSLATED FROM THE "REVUE DE CAVALARIE,"  
BY CAPTAIN W. W. FORSYTH, SIXTH CAVALRY.

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IF THERE is a war where the cavalry has been employed on a scale unusual in Europe and with a method quite new, it is certainly the War of Secession, which has not, perhaps, been studied with the care which it deserves, and which deserves to be the subject of serious reflection. At the time of declaration of war, the Americans had a small army, and the officers, who were graduates of the Military Academy at West Point, belonged, for the most part, to the South, with which they sided. On account of the small number of officers and the powerful armies which had to be created, it was necessary on both sides to form cadres that were new throughout.

These young armies operated rather according to the inspiration and character of their chiefs than in accordance with a general method. From the cavalry point of view, the Southern men were much more accustomed to horses than those of the North, and their country furnished better animals. In the Southern army, a large part of the cavalry was attached to the infantry, with a reserve of two brigades. At the beginning this cavalry, which maneuvered badly, had frequent reverses, but later when reorganized, it reached 8,000 to 10,000 horse, assembled in independent divisions, and at the end of the war it had reached 35,000 men. In the South the cavalry was not more skillful in maneuvering, but it showed itself at the beginning bolder and more enterprising. Of the American generals, some were graduates of the Military Academy and commanded regular cavalry; others, bold, adventurous, enterprising men, had attained by their personal merit to the command of large troops of partisans.



Before studying some of the operations of the American cavalry it may be well to examine its composition, physiognomy, and its manner of fighting. We shall, therefore, examine how cavalry corps on each side were composed and say a word about their principal generals.

In the Southern cavalry, MORGAN's corps was composed entirely of volunteers; it comprised ten regiments, each regiment having ten companies of fifty men. When MORGAN wished to prepare for a raid, he sent into the country that he wanted to raid disguised men called scouts, who informed him about everything that would be important to know of the enemy and of the country, in which they usually remained until the arrival of their chief. All the American generals, however, employed this mode of information before undertaking their expeditions. This was very easy when the scouts were sent into a country favorable to those who sent them, but less easy in the contrary case, although there was then no great difficulty, as each country always contained partisans of both sides, and as all spoke the same language and were of the same nation. The clothing was very simple; no uniform or almost none, and as MORGAN operated especially in rich localities, supplies could be found in abundance. The horses carried only the saddle and saddle blanket and no baggage nor provisions. The arms were a carbine with a bayonet and one or two revolvers; two companies only in each regiment had the saber. They lived on the country. The usual gait was the walk; they did not make more than five or six kilometers per hour, but they often marched twenty or twenty-one hours out of the twenty-four, and it did happen that the men could be allowed only three hours' sleep out of forty-eight. MORGAN's longest march was one hundred and forty-five kilometers in thirty-five hours. While on a march, they took supplies from the neighboring farmers along the road. If horses became unserviceable they took others from the farmers, leaving them the broken-down animals. There was in America an enormous consumption of horses during this war, and no country exists in Europe which could have supported the like. As the saddle horse abounds everywhere, these exchanges were possible, but often they took horses of an inferior race and left blooded horses, as were those of Kentucky in which MORGAN had recruited his command. They camped where they happened to be on the highway, the bridle on the arm, men and horses eating what they had found. MORGAN always observed the greatest precautions, the main body being held well in hand and marching on a single road. As fighting tactics, he

laid it down as a principle that one must do the contrary of what the enemy must believe as reasonable. He attacked with extreme energy at the beginning of a raid in order to produce moral effect, and when his object was attained he avoided fighting as much as possible. Although his men, for the most part, were excellent horsemen, they rarely fought except on foot, the nature of the terrain often preventing marches or charges across fields. One or two companies only remained mounted as a reserve and for mounted action. MORGAN usually amused his adversary in front in order to fall on his flank or rear, making sometimes a detour of eight or twelve kilometers. He had very little artillery at first—two mountain pieces drawn by two horses; later four 12-pounder shell guns and two Parrotts were added.

Another partisan chief of the Southern army was FORREST. He was admirably endowed by nature, but lacked all military education; he possessed extraordinary bravery and dash; his corps of partisans comprised three divisions of three brigades of two regiments, and amounted to about six thousand men. In the main, his men were armed with the saber attached to the saddle, with carbine and revolver. FORREST's troopers were soon convinced of the inefficiency of their sabers, and replaced them with one or two extra revolvers. When FORREST wished to execute a raid or a far-reaching stroke, he made careful preparations. Like MORGAN, he sent scouts a considerable time in advance into the midst of the country where he intended to operate. When he wished to deliver a quick stroke, he took 400 or 500 of the most energetic troopers, to whom he gave the best horses. They carried on them only their weapons and their clothing, and two or three rations of cooked meat and bread. They marched sometimes twenty-four hours almost without stopping, breaking down their horses if necessary, because they were certain to find others in the country overrun. In more important expeditions FORREST was followed by light wagons carrying supplies and tools. The gait of the march was the walk and trot. They ate and rested a little about noon, then marched until evening, bivouacked, and set out again the next morning. The main body usually made from forty to forty-five miles a day. The troopers exchanged their horses for those of the country whenever they wished. FORREST's tactics consisted in seeking to take the enemy in flank or in reverse. He often opened the attack with a regiment mounted, which made a show of withdrawing, and drew the adversary under the point-blank fire of a second regiment which had dismounted and concealed itself on both sides

of the road. The artillery, which followed everywhere, consisted of two light pieces for each brigade. When the action began they put them in battery and opened fire wherever they happened to be. They had no anxiety about compromising the guns; if they were taken, they would be taken back.

While the corps of FORREST and MORGAN were partisans, STUART's formed a regular cavalry which was organized like European cavalry, and which was dependent upon the armies, and did not make expeditions as long and as prolonged as those of the two first. STUART's men had for weapons the saber and revolver; they did not receive the carbine until later; they slept under tents, were well supplied, and followed by wagons.

The Federal cavalry at the beginning was inferior to that of the South. It was not long in profiting by the example of its adversaries, and its generals likewise made bold expeditions. There were GRIERSON, who, in 1863, marched with 2,000 troopers 900 kilometers in sixteen days; STONEMAN, who made a long expedition, which we shall analyze later, with 10,000 men; and WILSON, who had under his orders 35,000 cavalrymen, which really formed an army. On his raid in Alabama he was crowned with success. WILSON led 12,000 troopers, some artillery, and 1,500 dismounted men. Each carried five days' rations, twenty-four pounds of grain, one hundred cartridges, and two extra horseshoes; mules carried additional five days' rations of biscuit, and ten of sugar, salt and coffee. A train of 250 wagons completed this equipment. As did all the American generals, WILSON obtained information by means of scouts, who worked two or three days' march in advance. The gait was the walk (the trot being taken only under exceptional circumstances), the march from thirty-two to forty-eight kilometers a day. WILSON's corps was a kind of mounted infantry.

Finally, there remains SHERIDAN, one of the principal generals of the Northern army. His corps of cavalry was composed of 10,000 men armed with the saber, revolver and the seven-shooter Spencer carbine. They fought mounted only against cavalry; they had, however, on account of this, to suffer from the fire of the Southern cavalry who did not await the shock, and who drew these troopers under the fire of dismounted men as we have seen it done by FORREST. Against infantry, or when SHERIDAN wished to fight on the defensive, they fought dismounted, one man holding from seven to eight horses. The gait was usually the walk. The train carried only ammunition. Each man had on his horse four days' rations and two of grain — no extra articles. A large force of artillery was

at first attached to this corps, but it was reduced later, as in WILSON's corps, because it diminished the mobility of the column.

SHERIDAN thought that with modern weapons cavalry could no longer act mounted against infantry, and he permitted its use mounted against cavalry only when there was not time to dismount; nor did he believe in the saber, but was convinced that in the charge as in the *mêlée*, the revolver alone is efficacious. He employed his cavalry as mounted infantry, having the facility of delivering itself rapidly on a given point. He claimed that with 10,000 troopers he could prevent the concentration of 100,000 men by first destroying its cavalry by his fire, if the latter made war in the European style, and then making a dash on the communications and rear of the hostile army, attacking all his isolated detachments while he himself was free to accept or refuse battle by the mobility of his 10,000 men.

After this sketch of the organization of the American cavalry in the South and in the North, let us examine some of the operations of the generals whom we have named, in order to comprehend the results that the Americans derive from their cavalry.

In 1862 the two American armies were struggling on the banks of the Potomac. McCLELLAN occupied the banks of the river with the Northern army, the bulk of his army on the north side and his advance posts on the south side of that river. General LEE, commanding the Southern army, was established on the Rappahannock. General STUART resolved to make a dash on the rear of the hostile army with the object of destroying the railways, capturing his wagon trains, etc. The 10th of October he reached the Potomac with 2,000 troopers and a battery of artillery, crossed that river, turning the extreme right of General McCLELLAN, stampeded some advance posts of the enemy, pushed north as far as Chambersburg in Pennsylvania, destroying magazines and railroads; then feeling sure that McCLELLAN would intercept his return if he came back by the same road, he changed direction to the east and then to the south, scattering terror everywhere and destroying everything that could be useful to the Federals. He recrossed the Potomac at Whit's Ford on the left flank of the Federals, after having made a complete circuit of the hostile army.

This march had lasted only three days when STUART's cavalry had traversed 250 kilometers. Later, the Confederate army having been thrown back on Richmond, and that of the Federals occupying the line of Chickahominy with its line of supply on the Pamunkey, STUART, at LEE's order, with 1,200 men pushes northward, turns

the Federal army by its right and reaches the Pamunkey, burning and destroying everything on his passage, and routing the Federal cavalry that seek to stop him. He afterwards burns a railway bridge, thus interrupting the most important line of communication of the Federal army with the Pamunkey, and on the morning of the 14th, he reaches the Chickahominy, which he crossed on a bridge which he had repaired after having made the circuit of the Federal army. He brought back most precise information about the hostile army, after having destroyed several millions of dollars' worth of supplies. The men had not left their saddles from Thursday morning to Saturday evening, not stopping to rest or eat.

General MORGAN undertook his first raid with 900 men; it lasted twenty-four days, during which he made about a thousand kilometers. The raid took place in the States of Tennessee, Ohio, and Kentucky. He took seventeen cities and destroyed more than \$8,000,000 worth of material, magazines and railroads.

April 27th, General STONEMAN with three divisions of cavalry, forming an effective of 10,000 horse, passed the Potomac, and while one division watched the railroad to Washington, he moved south with the two others and established himself at Thompson's Cross Roads, a short distance from the James River. From there he sent columns in all directions pillaging the towns, destroying canals, railroads and magazines. One of these columns even reached the suburbs of Richmond. Finally, STONEMAN, threatened by superior forces, recrossed the Rappahannock, after having maintained himself in the enemy's country eleven days without material loss. One of his brigades had been cut off, but it succeeded in rejoining the Federal army, which was threatening Richmond on the south.

In the period of modern wars, a period which to us begins with the increase of range and rapidity of fire of firearms, the War of Secession holds a place of first importance because of its duration. The more a war is prolonged, the more are soldiers and tactics improved. Prolonged experience teaches what should be done or what should not be done, and it is for this reason that we earnestly insist on the study of the American cavalry, tried and proven with five years of a war in which all the resources of modern invention were employed. This cavalry was commanded by professional generals like STUART and by improvised generals like MORGAN and FORREST. All adopted the same or nearly the same manner of operating; it was, therefore, a sufficient test. The cavalry corps varied from 2,000 to 15,000 men; men were armed with the saber, revolver and carbine. Much use was made of dismounted action,

and certain bodies of cavalry were even considered as mounted infantry. The tactics was to seek to take the enemy in flank or in reverse, or draw him under the fire of dismounted men in ambush. There was little artillery, and it was very light. When they could not subsist on the country they carried rations and ammunition either on the horses or in wagons; never any reserve baggage.

Thus organized, these cavalry corps moved with remarkable independence. It was not for two or three days only that they remained isolated and distant from all support, but for entire months; they rendered immense services each for its own side, and SHERIDAN put an end to the war by cutting the communications of LEE and compelling him to lay down his arms. Could expeditions similar to those made by the American cavalry be executed in Europe? We have contented ourselves with saying that raids are impossible on our continent, considering the numbers of modern armies, the density of the population, etc., but as a matter of fact the question has never been examined seriously. It is in consequence of its organization that the American cavalry could make those long incursions, and we think that any cavalry organized like it could make distant raids and render the same services.

What, then, are the causes which render this cavalry so mobile? Its armament, its manner of packing and carrying needful supplies, the absence of impedimenta; for if it was sometimes followed by wagon trains, it was only for expeditions made with large numbers and of long duration. The artillery was light enough to follow everywhere and at all gaits, and most frequently was few in number.

Its armament: The principal weapon in the American cavalry was the carbine; afterwards the use of the revolver was recommended, and finally the saber. The cavalry was regarded as a mounted infantry, which does not, however, prevent it from charging, revolver or saber in hand, when the opportunity is presented. There is something distasteful to us about this name, "mounted infantry," and it is feared in Europe that by giving too much importance to the use of the carbine that the horse may be neglected. These fears and this distaste are childish; we should know how to look things in the face and to take advantage of all our means. The excellent magazine carbine that we possess must have its influence on the tactics of the future, because it gives us much greater strength in attack and defense, and we must know how to make use of it. NAPOLEON I. ever insisted on the necessity of firearms for the cavalry, and even desired that the latter should, in an emergency, dismount and take the place of infantry. "He even wishes that all



cavalry designated for detached service be provided with firearms, in order to be able to contend, if necessary, against infantry that it may find in front of it." By its range and rapidity of fire, how much more important is our carbine than the weapons of former times? Its power is more than quadruple that of the musket of the Empire, and its great precision and range permit its use in many cases where it could not before be utilized.

If, as is to be desired, the carbine was given to all troopers and non-commissioned officers, a regiment of cavalry could at least hold its own against two companies of infantry. Nor is it to be doubted that a troop of cavalry, profiting by the ground, could rapidly and suddenly establish itself on a crest, within range of the infantry, who will suddenly receive some volleys from a direction whence they thought they had nothing to fear. Instantly perplexity and hesitation ensue, and the first alarm having passed, it will be necessary to halt and reply to this attack. The advance of this infantry cannot be resumed until it has fathomed the importance of the attack, hence delay results. This body will not be able to contribute to the common effort and will be diverted for a time from giving the assistance and support which was expected from it at a given point, and when it shall have decided to oppose a serious counter attack, the cavalry will quickly remount before suffering too much from fire, and move to another point to carry out, if possible, a similar maneuver. If the fire of the cavalry falls on a line already engaged in front and takes it in flank and in reverse, it will very likely suffice to shatter it completely. The range of small arms permits the utilization of cavalry in this manner because it can always open fire at a sufficient distance to have the time and ability to withdraw when it begins to suffer too much from that of the enemy (or when the latter becomes too threatening), which it could not formerly do when the range of firearms was only 100 or 200 meters. Notwithstanding the superiority of infantry rifle fire, is it admissible that a brigade of cavalry shall be stopped at a bridge or a village by a section or even a company of infantry if the latter has no artillery? What! 400 or 500 men may be held in check by from 150 to 200? No; without having the pretension of struggling against infantry, we must not believe ourselves obliged to retreat before a few footmen if we want to have the mobility which is necessary to us, and if we wish to be useful and make those fruitful expeditions of which the American cavalry has given us the model.

On the 6th of August, at Forbach, two squadrons of dragoons dismounted, stopped the heads of column of General STEINMETZ in



order to give the troops occupying Forbach time to withdraw. It is not, however, to be said that the importance of the horse will be lessened; quite the contrary. If, in utilizing the carbine, we open for ourselves greater space, if we can circulate more easily, more boldly, the horse will be more than ever the instrument of our success. It is it that will permit us to reach quickly the place where we are least expected, to destroy the railroads and supplies of the enemy, and spread fear and perplexity in his armies; and the stronger we shall feel ourselves to overcome the obstacles that may be placed to intercept our return, the farther may our expeditions be carried. It is the horse that will permit us to approach the enemy's lines and reach his flanks, and the better our men and horses are the more we may attempt.

Besides the carbine, the American cavalry was armed with the saber and revolver; a marked preference was shown for the latter. A part only of MORGAN's troopers were armed with the saber; FOREST's partisans got rid of it, replacing it with one or more revolvers. It is generally believed in America that the revolver is more deadly than the saber. We read in the *Foreign Military Review* that the official medical statistics of the German Empire fixes the German killed and wounded during the War of 1870 at 65,160; out of this number only 212 were wounded and six killed by the saber. Now, in November, 1864, in a single action between a squadron of Federal regulars and a squadron of Confederate partisans, the latter, using only their revolvers, killed of the enemy in a mêlée of a few minutes twenty-four and wounded twelve. *The Review* does not state how many men were struck with the saber in this engagement, so we cannot make the comparison. Opinion, however, is not unanimous among the American generals; some prefer the saber to the revolver and believe that the former is superior in the charge. What is good in America would not, perhaps, be recommended in Europe. The revolver has long had a place in the manners and customs beyond the Atlantic, and to such a point that one cannot well fancy an American without one or two revolvers. The Americans have, therefore, more than we, the habit of this weapon, and know better how to make use of it. The question of the superiority of one over the other is difficult to answer, and we lack experience in Europe. It is certain that the firearm has a greater moral effect than the naked blade.

During the cavalry engagement which took place the 16th of August, 1870, northwest of Mars la Tour, a captain of Chasseurs d'Afrique had his horse killed in the mêlée. One of his men gave

him his mount and returned on foot. The return distance for this man was long, and he was surrounded by German troopers. I asked him how he managed to get back safe and sound; he replied that he carried his gun in both hands in the position of a hunter, with cartridges in the hollow of his hand in order to be able to reload quickly, and that whenever a trooper made a show of approaching him he raised his gun to his cheek, and the trooper made off in another direction. The man who is armed only with a saber in front of one who threatens him with a firearm has a sensation that he will, perhaps, receive a projectile that he cannot parry, and that whilst his adversary is not within reach of the point of his saber he himself is absolutely defenseless. In France they disdain a revolver; they even believe that in the *mêlée* this weapon may do more harm to friends than to enemies.

For our part, we do not believe that the revolver is superior to the saber in the charge when two troopers of the same class encounter each other. It would seem, however, that light cavalry would meet lancers and cuirassiers with more confidence, notwithstanding the superiority of their armament, if it were armed with the revolver, which would permit it to reach its adversary before the shock, for the latter have, by their armament, such an unquestionable advantage that the encounter front to front of the light cavalry with them appears to us very difficult, valor being equal. We do not wish to commit ourselves on a question so important, and will therefore leave it to discussion. Nor did General DE BRACK think that light cavalry could oppose heavy cavalry in front. When the charge was inevitable, his idea was to form in close column and to overwhelm one point of the hostile line with this mass of troopers, then quickly to make a half wheel and take the enemy in reverse. Or else he quickly uncovered the front by platoon movements to the right and left, and his force separated into two fractions, maneuvered by platoons to the left and right in order to fall on the hostile wings. This movement appears to us very delicate. General DE BRACK believed that cuirassiers could not easily change front. I believe that he should not trust to that, and that one might be easily surprised in exposing his flank to the charge. We have said that one of the causes of mobility of the American cavalry, was its baggage packing. Baggage was diminished to the utmost extent, and the horses carried no extras; none of those brushes that encumber us, and only ammunition and rations when they could not do otherwise.

In Europe the population is so dense, the towns and villages so close together that it is useless to encumber ourselves with a quantity of impedimenta, which serves only to load and wound a horse. Also, why should we have regiments followed by baggage wagons, which will be, when war begins, consolidated into trains and will never be seen again, and which can serve only to weigh down the columns, which may well be compared to a man wishing to run and dragging a cannon ball at his foot.

The officer must carry on his saddle indispensable articles, and on his extra horse useful things, and become accustomed to doing without his hampers, which he will not see again before the end of the war—if he ever sees them again. Diminishing the pack must lighten the saddle, which does not need such bulky holsters, and is constructed in too massive a manner. As to the artillery, we have remarked that the American cavalry was usually accompanied by very little, that it did not depend very much upon it, and knew very well how to do without it. Everything was rightly sacrificed to mobility. Cavalry, in its service of exploration and reconnaissance, should be followed by a few light and mobile pieces only.

Mountain guns, drawn by two horses, able to go everywhere and follow at the same gait as the cavalry, would be quite sufficient. What then is the role of artillery attached to the cavalry in advance of an army? It is to aid the latter in forcing a passage or else to serve it as a support on retreat; to compel the evacuation of a village held by a few hostile detachments; to destroy the approaches of a bridge; to check the pursuit of the enemy when the cavalry in retreat has to pass a defile; finally, in a cavalry combat, to pour in its shrapnel on the enemy. In all these cases its action will be only momentary and it will never have, in any case, to struggle against hostile artillery or to prepare the attack of a position. In a cavalry action the lightness and mobility of the artillery, the smallness of space that it will take up, will permit it at the outset to engage more rapidly and at shorter range. It has been a question of providing cavalry divisions with Gatling guns; the latter could indeed render great service, but they could not completely take the place of cannon, which have more power against obstacles, can more easily batter down a gate, a barrier, or destroy a wall.

In connection with the foregoing, it may be objected that the cavalry united with the artillery will have an important role to fulfill on the battlefield, by quickly occupying positions before the infantry has deployed, as did the First Brigade of Cavalry of the German Guard, which made thirty-five kilometers at the rapid gaits

in order to bring a battery from Carignan on the field of battle, or else of throwing itself on the flanks of the enemy during an engagement, as did a battery of the Rhinebaben Division the 16th of August, and that the materiel, as we would desire it, would be insufficient for this purpose. We do not ask that the horse batteries be suppressed, only that they should make a part of the artillery reserve of the army or of the army corps; and when necessary to send them forward rapidly, they could be escorted by the cavalry more or less strong in order to have them aid in the general plan; but it is not necessary on this account that they should be permanently attached to the cavalry. Army corps and divisions, as they are organized in times of peace, will certainly not always be maintained of the same composition on the battlefield, considering the great development of armies. It cannot be admitted that a division, which shall find in front of it a covered terrain in which it can utilize only a part of its artillery, should leave inactive pieces which would be very useful elsewhere. The skill of the general will consist especially in a judicious utilization of his forces, so that no effort may be lost, and that each may give the maximum of its powers in order to attain the desired result, and the cavalry will often have to escort artillery thrown rapidly on a distant point.

Are raids possible in Europe? In the true American sense they would be more difficult. In the New World they were facilitated by the character of the war itself. The people spoke the same language, and in each country both sides found allies, and the dispersion of the states which had pronounced for the one cause or the other, multiplied and isolated the theaters of operation; in short, it was the configuration of the country. That narrow passage called the Valley of the Shenandoah, which permitted communication for the Confederates to the north and for the Federals to the south of the enemy without having anything to fear on the flanks, protected as they were by the Blue Ridge Mountains, was, from the nature of things, the theater of numerous expeditions of this kind. Another cause which will prevent these long expeditions from being made without a full knowledge of attendant conditions, and for an object of sufficient importance and ease of accomplishment, is the enormous consumption of horses which they will necessitate. The raids of partisans, like those of MORGAN and FORREST, lasted many days; those of the regular cavalry, like those of STUART, were executed in three or four days. It is these last which we believe might be usefully practiced in Europe.

The cavalry in advance of armies has two essential objects; the first, to seek to gain information about what the enemy is doing; the second, to prevent him from knowing what our armies are doing. Another one, which is a corollary of these two, is to embarrass the enemy in his designs. During the period of mobilization of the armies, which will last at least five or six days, the cavalry in large masses will be sent to the frontier at the very beginning. Will not its duty be to make expeditions, in order to seek to embarrass the concentration of the adversary? Destruction of railways will be of capital importance at a time when everything on both sides has been calculated in order that the armies may be concentrated in a minimum of time. Will the covering troops, placed in advance to cover the concentration, be sufficiently dense to prevent a body of cavalry from passing in the night through the meshes of their net, and, making a quick dash for the railways, have time to destroy them sufficiently to cause serious trouble, not only in the passage of the trains of that line, but also of connecting lines?

In 1870, conditions were not the same on both sides, and the mobilization of the French army was so much behind that of the Germans that there was no need of the latter to embarrass it, but they could have done so by throwing their numerous cavalry beyond the Sarre. Later on, they might also have caused great annoyance in the concentration of the army in the camp at Chalons because the German cavalry was available the 19th of August, and it was not until the 25th that the army began its movement. It would have taken only three days for the cavalry to gain contact, and there were six days before it. Later still, when the numerous German armies were operating at the north, south, and around Paris, if France had not had its cavalry after Sedan almost completely ruined, bodies of cavalry thrown to the northeast between Orléans and Langres would have certainly been able to operate against the long lines of operation and concentration of the enemy, which, considering the importance of the communications for such numerous armies, would have compelled them to detach, in order to guard them, a much more considerable body of troops, without counting the annoyance which those expeditions would have caused on account of the destruction of supplies of all kinds or of delay in their delivery.

We have observed that these raids were carefully prepared in advance, and that the generals, before undertaking them, sent ahead numerous scouts who gave them detailed information. It would be desirable that this mode of information should not be neglected.

In virtue of that eternal maxim of war that "the one who knows what the other is doing will beat him," it is evident that if the commander of an expedition of this kind knows exactly the places of assembly of the enemy's troops, how and at what places may be found the fractions which form the curtain of protection for the concentration, he can easily decide what he might be able to do and arrive at a successful result in the execution of his plans. It is therefore necessary that the chiefs of cavalry, from the beginning of operations, be kept well supplied with all the information that can be obtained about the enemy from whatever source it may come, and that they have a well organized secret service.

## PROFESSIONAL NOTES.

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### EDITOR'S NOTE.

*To the Members U. S. Cavalry Association.*

GENTLEMEN:—The time has come when the Association must decide for itself whether publication of the JOURNAL shall continue, or be suspended indefinitely. Our cavalry regiments are now so scattered, and the officers so occupied with the multifarious duties attending the new condition of things, that the editor well understands the difficulty of furnishing matter for the JOURNAL, proceeding, not from a lack of interest entirely, but from a lack of time and opportunity.

The matter rests with the Association. If enough literary matter reaches the editor by December 1st, to justify publication, the December number of the JOURNAL will be issued, otherwise its publication must of necessity be suspended.

Your editor is himself editing the JOURNAL in the midst of duties which are very exacting. But he will cheerfully continue to give up a large share of his spare time to the JOURNAL, if the members of the Association will contribute their much needed assistance. There is so much at present of interest to the cavalry, both in Cuba and the Philippines, that surely the one-time excuse of "lack of material," cannot now hold good.

Owing to the fact that the War Department no longer publishes the addresses of officers in connection with the monthly list, the



Secretary of the Association has been unable to ascertain the correct mailing addresses of a number of members of the Association. In case you have not received your JOURNAL regularly, please mail your correct address, and future changes of address, to the Secretary of the Association. Very respectfully,

CHARLES D. RHODES,  
*First Lieutenant Sixth Cavalry,*  
Editor.

FORT LOGAN, COLORADO.

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[[For the U.S. CAVALRY JOURNAL.]

### SHORT NOTES ON SOME PRE-HISTORIC EUROPEAN CAMPS.

#### THE CAMP OF BULSTRODE, IN BULSTRODE-PARK, BUCKINGHAMSHIRE.

In Buckinghamshire, on the main London and Oxford road, twenty miles distant from Hyde Park corner, and eight miles north of Windsor and the Thames, is an intrenched hill-top, a level plain of twenty acres extent, surrounded by earthworks, single, double, and triple, with moated hollows between, varying from one to eight feet in depth, now clad with verdure and flowers.

The Camp is on a spur of high land with a valley about half a mile wide on the southwest, which rises almost on a level with the Camp on the north; where, on the *vallum* are faint traces of flint walls, parted about ten feet, as if of a gateway entrance to the Camp. Two hill-spurs on the west and south, are about the same level as the Camp within the intrenchments. On the south, a narrow gorge separates the Camp from the adjacent hill. To the east, the ground-level is the same height as the Camp, forming the Gerrard's-cross, village, plain, common, and enclosures, outside Bulstrode-Park wall.

An unfailling water supply by ponds of small size, is just outside the intrenchments on the north and south sides. The Camp is situated near the Bull-Lodge gate of the Park, on the Oxford road, about three hundred yards distant. Formerly, the Oxford road was within the Park bounds, until diverted to its present course. An extensive outwork cut the Oxford road at some former time; it is a gap about ten feet deep, now leveled up where the road crosses it. This is four hundred yards northwest of the camp.

On the south, and about a quarter of a mile from the Camp, are many pits, and remains of intrenchments. The Camp is about eighty feet above the adjacent western valley. On the opposite hill, half a mile away, is Bulstrode Mansion.

The Camp, within the intrenchments, is twenty acres level ground. Around the mounds and moat are trees, seemingly as old as the period of the Conquest. Some of the later growth are to be

found, with a profusion of young trees—elm, alder, wild-cherry, and a profusion of shrubs as wild raspberry, sloe, furzo, broom, fern, and heather, in luxuriant, mingled growths.

The name of Bulstrode Camp is almost all that is known of it—besides the tradition that the name was derived from the fact of the farmers under the leadership of the English yeoman, SHOBINGTON, defeating some Norman troops there, and of riding them down on their oxen. The legendary tag-on to the tradition, is that WILLIAM, when he heard of the defeat of some of his troops, sent for SHOBINGTON, who, accompanied by his sons, rode up to London bestriding their victorious oxen; and, in answer to the Conqueror's question, "How he dared to oppose the Norman?" replied: "To defend his home and lands, and that he would dare do it again if assailed;" and that the Conqueror was pleased by the blunt reply, and that he confirmed SHOBINGTON in his possessions. This seems more like a Norman than an English aspect of a doubtful incident, following a defeat which the boastful Norman scribes never chronicled. That such a defeat was probable may be assumed, as it will be remembered, after the battle of Hastings WILLIAM went direct to Oxford and crossed the Thames there with his army; but instead of striking directly east for London along the direct road, he went across heath, bog, and woodland, northeast to Berkhamstead, doubtless to meet contingent additions of priest-soldiers. He had secured the south side of the Thames, and seemed now effecting the same on the north side of the river to London. Possibly the right wing of his army was sent by the main Oxford road to London—perhaps under DE BOURG—to harass the inhabitants along the left bank of the Thames, and was worsted at the Camp by the English yeomen there.

No exploration of the Camp has ever been attempted, though paleolithic tools, horseshoes, and many bones have been found.

L. LODIAN,  
*Civil Engineer, (Paris).*

#### FIVE-YEAR ENLISTMENTS FOR THE CAVALRY.

A few years ago enlistments for all arms of the service were for a period of five years. Circumstances were such that it was thought expedient to change to three-year enlistments. What were these circumstances, and are present conditions the same or widely different?

The principal reason for the change, as I remember it, was the alarming and ever increasing number of desertions, especially in the West. The old post-trader system was in force, or, at least, its evil influence was still felt. Pay days were often bi-monthly and were marked by orgies which the strictest discipline and severest punishment seemed unable to check. Amusements at far western posts, with the exception of occasional hunting trips, were confined almost entirely to those which demoralized the men. The years dragged along, and men welcomed most gladly any relief from the monotony

of garrison life, which kept them in the field. And desertions, as a matter of course, became so common, that at reveille after pay day, it was not uncommon to find a score of men missing from the garrison.

Then came the change. The reward for deserters apprehended was considerably increased. The regulation in regard to 11 P. M. inspection of quarters was introduced. The summary court began to take jurisdiction of minor offenses. Athletics, up to that period somewhat dormant, were encouraged; and kindred amusements took the place of monte and faro. And, too, the post exchange system decreased drunkenness, decreased violations of discipline of all kinds, improved the ration, provided the money for the encouragement of innocent amusements, and gave to the soldier, in a sense, a social club.

From the time when three-year enlistments were introduced, the whole tone and morale of the army began to rise, not from the change in the term of enlistment altogether, but from the various causes enumerated above. Where it had heretofore been difficult to obtain recruits for the cavalry except from the ranks of the unemployed and worthless, native-born Americans, rosy-cheeked farmer boys and intelligent mechanics from the cities, applied for admission to the honorable profession of a soldier. And due to the increased interest in enlisting, the government was able to raise the standard of recruiting, mentally, morally and physically, to such a height, that the recruit for the regular army of to-day stands without a peer in the entire world.

Thus I have briefly sketched the changed conditions of affairs from the time when five-year enlistments were considered demoralizing to discipline, to the present day. Now let us look at the manner in which the cavalry arm is affected by the three-year law. No doubt, when the three-year enlistment law was enacted, the authorities realized to some extent, as the cavalry officer of to-day realizes to the fullest extent, that three years was a very limited period in which to mould an efficient cavalry soldier. But at that time it was simply the choice of the lesser of two evils—poorer cavalry soldiers professionally, but better soldiers, perhaps, morally.

To-day, every cavalry officer of any experience knows that it takes at least two years to make a fair cavalry soldier. And how many really "good" cavalry soldiers does the average troop contain? Certainly very few indeed. The many loop-holes offered good soldiers to quit the service, through purchase, through favor as veterans and through political influence, sidetrack many a promising soldier whose loss is severely felt by the troop, and who, in very many cases, goes out without mature deliberation and without bettering his condition in life.

Taking an average troop of cavalry at present, it is safe to say that one-third of the troop goes out in a year, and two-thirds by the end of the second year. In a five-year enlistment, when well started, these figures would be one-fifth the first year and two-fifths

by the end of the second year. From the end of the second year of a soldier's enlistment onward, the probabilities of his discharge decrease. The consequence will be that the number of expert cavalry soldiers in the troop at the end of the second year will be much greater in the five-year than in the three-year enlistment. Moreover, in the former case the expert cavalrymen will remain in three years longer instead of one year. The effect of a large number of old soldiers in the troop, provided, of course, the troop commander keeps the "old soldier element" up to a high standard of discipline, will react most beneficially on the recruits who join, and their first impressions will be permanent and lasting.

As a matter of economy to the government, the saving on the clothing allowance alone will be considerable. The difference between the allowance for a three-year enlistment, plus two years of a reenlistment, as compared with a straight five-year enlistment will amount in five years to a saving of \$33.76 for each soldier—supposing the clothing allowance in the fourth and fifth years of a five-year enlistment to remain the same as that of the third year. This will amount in the cavalry alone to a saving of \$405,000 in the five years, or \$81,000 a year—quite a snug sum when frequent complaints are made of the expense of maintaining cavalry.

A new factor too—foreign service—has appeared, which will in time require the employment of comparatively more cavalry than of any other arm. The continual loss of men by discharge will be augmented by losses from sickness and disability; so that with five-year enlistments the benefit of having experienced and acclimatized soldiers in the Colonies will be very marked, even if we do not reckon the saving to the government of transporting discharged soldiers thousands of miles to their places of enlistment, and of replacing them with recruits.

We may thus summarize the disadvantages of five-year enlistments, as follows: (1) Discontent and restlessness, resulting in impaired discipline and increased desertions; (2) Difficulty of obtaining desirable recruits.

The first disadvantage will not be as marked as some might fear. Natural soldiers, who would make soldiering their profession, would as readily enlist for five as for three years. And discontent might be minimized by granting a four or six months' furlough—four months, if taken at the middle of the five-year enlistment; six months, if taken at the end of the enlistment. Difficulty in obtaining desirable recruits will not be extraordinary, if we may judge from the ease with which the U. S. volunteer regiments have been recruited up to their authorized strength. Love of adventure, in-born in the American youth, will make enlistments for foreign service far more eagerly sought after than were ever those for monotonous frontier duty. If thought desirable, the "war pay" now existing might well be continued for five-year enlistments for foreign service.

The advantages of the longer period of enlistment for the cav-

alry may be summarized: (1) Greater efficiency for the cavalry, professionally, both in individuals and organizations; (2) More soldiers who will adopt soldiering as a profession; (3) Decreased sickness in the Colonies, due to a greater number of acclimatized soldiers; (4) Economy to the government in clothing and transportation.

C. D. RHODES,  
*First Lieutenant, Sixth Cavalry,*  
Editor.

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I advocated the three-year enlistment prior to its adoption and have found that it works well. The five years look interminable to the new man, while the shorter term of three years enables the government to fill up the ranks more easily than under the old system. It is found that, as a general rule, many reenlist, thus practically making a longer term enlistment. It takes, in my opinion, two years, including two target seasons, to make a good all-around cavalry soldier. As I have intimated, the general rule is, that the short term easily taken engenders the taste, and other organizations, if not the old, get the benefit of the training on reenlistment. I have watched closely for years, and the opinion is not hastily formed. Very respectfully,

GEO. H. SANDS,  
*Captain Sixth Cavalry.*

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The greatest disadvantage of the three-year enlistment system is, that about that length of time is needed to make a proficient soldier. This is especially true of the mounted service, for as soon as a soldier becomes proficient his term expires, and, in the majority of cases, does not reenlist, and the cost of his education for a soldier is lost to the government. As the future service of a larger part of our army will be in our distant island possessions, the short term of three years will be noticeably felt in the rapid changing of enlisted men, and filling their places with new recruits; and in the greater expense to the United States for less efficient soldiers; on account of the increased clothing allowance for the first year's service, and the greater cost of transportation home for the discharged men; on account of more frequent discharges. To the men who adopt the military profession as an occupation for life, it is immaterial whether they enlist for a term of five years or a shorter period.

F. WEST,  
*Captain Sixth Cavalry.*

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In reply to your note of July 31st. I fully agree with you that three years is too short a time to make a cavalryman. But considering the nomadic habits of Americans, and especially of Americans of the age we want, I fear that we could not resist the pressure they would make for discharge whenever the whim seized them. The discharge of men by political favor is a great evil to be avoided. I see no reason why at this time, when we are undoubtedly to be

compelled to take a leaf here and there from the experience of other nations, we should not adopt their plan of giving higher pay to the cavalry than to the infantry. Requiring some knowledge of horses and riding, and selecting recruits carefully, we could soon build up a *corps d'elite* whose men would do as much in three years as the men we are getting now would do in five. Why should there be any demur at paying the trooper more than the footman when he is required to know everything that the footman knows, and his horse work besides? Then again, his daily labor is twice that of the infantry when we consider the care of horses and extra work on horse equipments and weapons. It seems to me that much might be done in the way of improving the condition of the trooper, without waiting for legislation, if the War Department so desired; the cavalry could be treated as the light batteries always have been treated in our service, as special troops whose whole effort was to be concentrated on their special duties; their clothing could be cut to fit and to adapt it to mounted use—a thing that has never been done in our service; and in many ways the cavalryman could be compensated for the greater efforts, greater abilities and greater knowledge and training required of him. Sincerely yours,

FREDERICK S. FOLTZ,  
*Captain Second Cavalry.*

I heartily favor a return to five-year enlistments in the cavalry, for there are nowadays so many avenues of escape from service that but a small proportion of those who enlist for three years serve the full term. Of the last one hundred men discharged from my troop less than one-third have left by reason of expiration of term of enlistment. To secure the men, however, this change should be coupled with an increase of about \$2.00 per month upon original enlistment, while pay for continuous service in the cavalry should be doubled to compensate for the longer term and harder work in the mounted service. We doubtless secure in the cavalry a more restless class of men than enter the other arms of service, and it is true economy to offer some inducement to men, whose training has been so expensive, to remain in the service.

W. C. BROWN,  
*Captain First Cavalry.*

I am certainly in favor of all enlistments after the first being five years; but as to the first enlistment I am somewhat in doubt as to whether, on the whole, the three-year or the five-year enlistment is the better. You cannot make a very good cavalry soldier in three years, but on the other hand perhaps it is wise to give those not especially suited for cavalry a chance to go out at the end of three years.

Very truly yours,  
H. H. SARGENT,  
*Lieutenant-Colonel 29th U. S. V. I.*

Officers are urged to express their opinions, for and against this important matter of enlistments.

THE EDITOR.

## REPRINTS AND TRANSLATIONS.

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### HORSE AND MAN AS A FIGHTING UNIT.

BY LEVIN CARNAC.

The making of a horse-soldier differs from the training of a foot-soldier chiefly in this; in the first instance you have, to state the matter in its lowest terms, to take your raw material, pass it through the mill of discipline and turn it out as a finished article. In other words, you have to take your man off the street and change him from a more or less aimless and purposeless individual into an intelligent and, to a great extent, self-directing unit of a vast organization, which itself must live and move and have its being as an enormously multiplied individual, acting under the influence of a brain and nerve centers represented by what may be conveniently described as the General Staff. Your man has then become a foot-soldier.

But the cavalryman must be this and a good deal more also. He must not only be responsible for his own movements, but for those of another sentient being, endowed like himself with intelligence and volition, and, moreover, he must make it act in perfect accord with himself as a unit in a much larger organization.

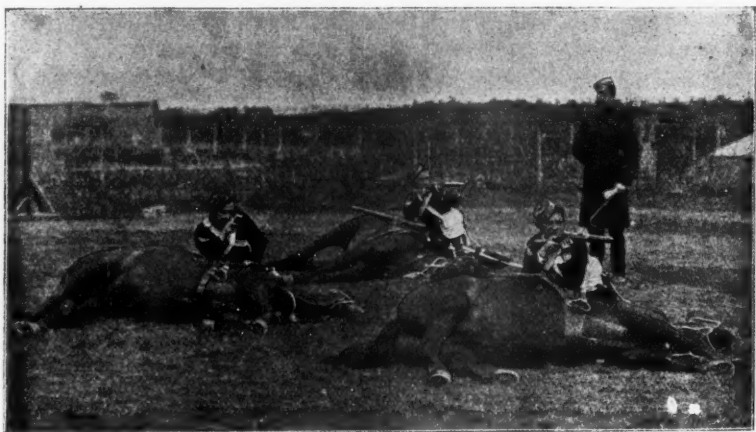
Naturally this object must be approached by two different converging paths. You must train your man and you must train your horse—first separately, and then together.

During the earlier stages, the training of the horse-soldier differs in no essential particulars from that of the foot soldier. As for the horse, the cavalryman's other self, half or wholly broken, usually the former, he comes to the depot, thence to be drafted, according to his size, color and weight-carrying capacity, into the various regiments, in the riding schools of which he will make the acquaintance of his other self, and where they twain shall for all military purposes become one—on drill and parade, in peace and in war, in victory and defeat. As they live together so may they die together, and hence it is as well that they should understand each other as perfectly as possible.

To begin with the man. The first thing that has to be done is



to develop his muscles and bring them into as nearly perfect accord with his nerves as may be managed. The muscles are to the man as the man is to the regiment, and the regiment is to the army. In the French cavalry instructions you will find frequently repeated, especially in the earlier parts, a very significant word: *Assouplissement*. This word is the key to the training of the horse-soldier. It means not only suppleness but adaptability. During the French course of training, which may be taken as a general model for all European armies, thirty separate lessons are devoted to this alone. These constitute the first period of training, which begins after the recruit has passed through the ordinary course of gymnastics and has been taught to swim.



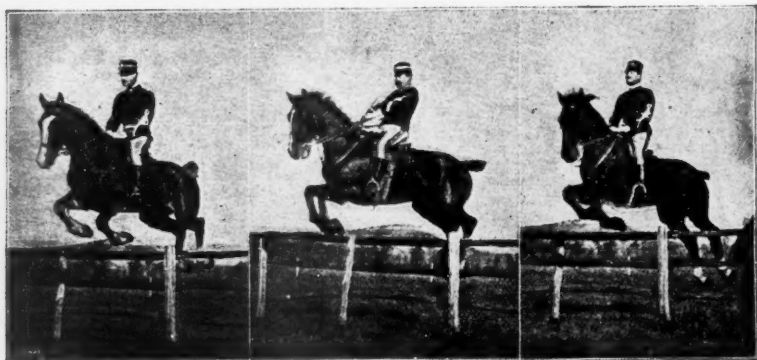
TRAINING HORSES TO LIE STEADY UNDER FIRE.

It may also be here mentioned that he has further learned to box both with his hands and his feet. The exhibition of "La Savate" is merely a development of the French military training, both for horse and foot-soldiers. At close quarters, the scientific kick, unfair and all as it seems to our notions, is, nevertheless, a very useful thing. I have been told by German officers that many a stalwart Prussian and Bavarian went down in *mêlées* before a Frenchman half his size, not through stroke of sword or bayonet, but just with a kick, after which the bayonet came into use.

In the training of a horse-soldier kicking would not seem to be of much use, although I have heard that a smart French cavalryman can, even on horseback, disable an adversary with a kick. But naturally an opportunity of doing this would very seldom occur. Still, it can easily be understood that training of this sort tends very directly to the general end of all military training—the instant

response of the trained muscles to the trained will. It is worth noticing that this hand and foot drill is called in the French regulations "La Boxe," and in all European armies "Trot" is rendered, according to the particular vernacular, as a version of the French term: "Le trot Anglais." Further, the order to trot given by a French cavalry officer is just "Trot."

The thirty lessons of the first period in the French army are followed by twenty-five more of "drill with arms," beginning with the rifle and ending with the elementary management of the saber. Then come thirty-five more of combined carbine and saber drill, and after that the recruit enters upon the third period, during which he drills with others in squadron. Altogether, the French cavalry recruit goes through 112 separate lessons and revisions



ITALIAN CAVALRYMEN JUMPING.

before he is considered fit to get upon his horse. And this may be taken as a fair sample of the preparatory training of the European cavalryman.

This completed, he is introduced to his other self, and learns to ride, or to become the governing portion of the organism which we call a cavalryman. The French instructions divide this part of the training into five parts: To sit his horse; to guide it; to act with it as an independent unit; to use his arms on horseback; and, finally, to maneuver as one of a troop.

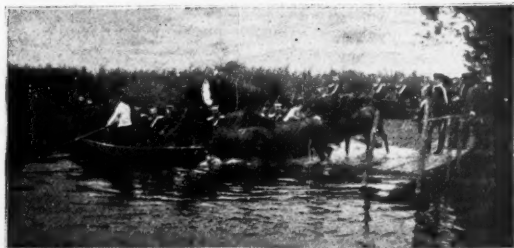
The first stage takes twenty lessons, the second thirty-seven, the third five, the fourth twenty, and the fifth thirty.

At the end of this course a man is supposed to be entirely at home on his horse, and with it to do everything that is humanly and equinely possible. He must ride it without saddle, then with saddle and without stirrups. He must learn to guide it with his knees as well as with the reins. He must swim it through rivers and he must take it into the water and swim beside it. He must

teach it to climb hill-sides like a monkey and slide down them like a cat. And, lastly, he must be able to do everything in the saddle that he could do out of it, except, of course, walk on his feet.

It is worth noting here that the European horse-soldier is first taught to swim on dry land—that is to say, he has to practice all

the movements of swimming and floating in various postures in the gymnasium. In the next stage he is taken to the bath, or river, and practices these movements in



the water, supported by a cord fastened to his belt. But when he has learned to swim there is another stage for him to go through. He has to jump into the water fully uni-



GERMAN UHLANS TEACHING THEIR HORSES TO CROSS A RIVER.

formed, just as he would be in the field, and swim and float supporting the whole weight of his equipment. That, at any rate, is the theory as laid down in the official instructions, and

granted that it is actually carried out, as it usually is, it must be admitted that, by the time his various instructors have done with him, the recruit has been turned into a very efficient man in all physical senses.

When his course of equitation is finished, the horse-soldier, as such, is completed. But he is continually exercised in all sorts of feats of horsemanship that may be useful to him, and, moreover, he and his horse have still to be taught to keep as cool and self-controlled on the battlefield as they would, be on parade.

For instance, it would never do for a cavalry horse to be what sportsmen call "gun-shy." He must be able to stand all sorts of reports, from the crack of a revolver to the roar of a battery of artillery, without flinching, and so he is taken carefully through all the stages, the great object being to convince him that the noise does not mean any danger to him.



AN ITALIAN HORSE-SOLDIER COMING DOWN A PRECIPICE.

In the British army the four-legged recruits are drawn up in a ring round an instructor, who fires a pistol. Some take the flash and report very quietly, and these are soon passed on to severer trials, while the others have lesson after lesson until they are quite convinced that there is no danger to them, and, before long, you might fire a seven-pounder within a yard of them and they would hardly look round.

After this, they are taught to face fire—that is to say, to gallop fearlessly up to a line or square of infantry, blazing away with their rifles, and to charge batteries of quick-firing guns. Of course, only blank cartridge is used, and so, to a trained horse going into battle for the first time, there is no difference between the harmless thunder of the maneuvers and the death-dealing storm which sweeps over a

battlefield. The poor brute only learns what the difference really is by bitter experience.

When smokeless powder came into general use, it was found that in many cases, horses which would face the smoke of guns, using black powder without flinching, flinched and shied at the flash and roar unaccompanied by smoke.

European opinion is somewhat divided as to the moral effect of smokeless powder on men and horses, but the general conclusion seems to be, that in daylight it is not more terrifying than black powder, although some hold that to see men and



MORE MARVELOUS FEATS BY  
ITALIAN CAVALRYMEN.

horses struck down by an invisible agency must necessarily be so. But it is generally agreed that the use of smokeless powder at night has a much more disturbing effect

than that of the old powder, because the flashes of the guns, unobscured by smoke, are a great deal more vivid.

The fear thus inspired can, however, be overcome by training; but there is another fear which must, in the nature of the case, be felt for the first time on the battlefield, and that is the often uncontrollable terror produced both in men and horses by the whistling of bullets and the screaming and banging of shells. Some authorities have, indeed, said that since the introduction of smokeless powder and the great increase in the range and accuracy of weapons, it

would be impossible to keep cavalry in hand under the fire of modern artillery, but this is probably an exaggeration.

As regards time of training, it, of course, varies very much in the case of both men and horses. Some men are born horsemen, others can be made, and others again can never become good horse-soldiers. And so, too, with the horses. Some take to their drill as if they knew exactly what it was all for, and seem to be actually possessed of military ambition. In every cavalry regiment there are scores of horses which have just as much *esprit de corps* as the men themselves. Others can do their work but they have to be made to do it, while others are found quite unfit for



A GERMAN HUSSAR JUMPING.



A GERMAN HUSSAR DESCENDING A HILL.

their high calling, and have to be "dismissed the service" with ignominy.

With regard to variation of system, there is not very much to be found in the official regulations. They are all very formal and very precise. Every step of the training is set out minutely in a separate paragraph. Every movement and combination of movements is described in detail, and even the time is specified which has to be devoted to each of them. Of course, in certain armies more stress is laid upon those parts of the training which fit horse and man to overcome special difficulties offered by their own country.

Thus, for instance, the Italian cavalry, which in the event



of war would have to work in the Alpine regions of the north, is specially trained, not only in hill-climbing, but, what is equally important and a great deal more difficult, hill-descending. Some of the photographs here produced seem almost open to the charge of being "faked," and yet they are all taken from life and on the spot.

This form of rough-riding has also recently come very much into vogue in Germany and France, but the Italians were the first to make a definite military study of it. In the British army it is not so. It is true there are a class of instructors in the British cavalry officially styled "rough-riders," but there is no rough-riding as distinguished from any other sort.

This fact, however, should really be read the other way about. I mentioned the Italian exercises to a cavalry instructor at Knightsbridge, and asked him if this sort of rough-riding was practiced in the British army. In reply he just laughed and said: "No, we don't practice it specially. You see, rough-riding is only a sort of



BRITISH CAVALRYMEN LEARNING TO MOUNT.

term. We teach a man to ride, and we teach his horse to carry him, and the man who can ride and has that sort of horse under him can go anywhere. Our fellows wouldn't think anything of that sort of thing. Wherever a horse and a man can go together, they'll go."

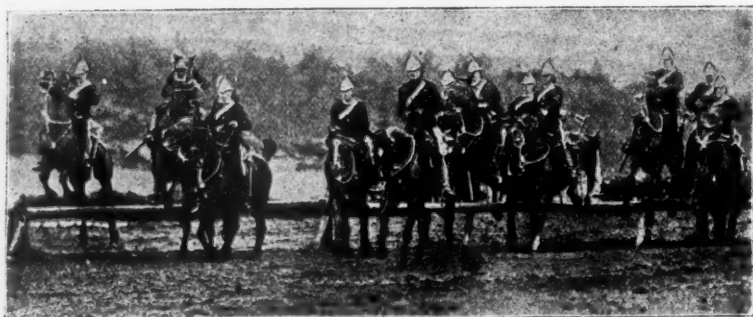
From this it will be seen that, although the training in the British army is not governed by such rigidly precise instructions as those which we find in the Continental regulations, it is really quite as thorough. The fact that the British horse-soldier does as a matter of course what the German, the Frenchman, and the Italian has to be specially trained to do, is a very significant one.

One reason for this superiority, doubtless, is that the British soldier is in one sense a volunteer, while the Continental man is not. Granted health and stature, the man who enlists in the British army chooses his regiment, and can become a light or a heavy cavalryman, an infantryman, or a "gunner." But the Continental conscript has not this choice. He must serve his time, and he must be what the authorities make him, although, of course, if a man is found



obviously unfit to be a horse-soldier they make a foot-soldier of him. Hence, as a rule, the British recruit who offers himself to the recruiting sergeant of a cavalry regiment makes all the better horse-soldier because he wants to be one.

The same thing is practically true of the American horse-soldier, only perhaps a little more so because, especially "out West," the American almost lives on horseback, and of course he has the old Anglo-Saxon affection for horseflesh in his blood. Then, too, some of the most graceful horsemen in the world are to be found in the Southern States, and everyone knows to what a pitch of perfection horse-breeding and training has been brought in the East.



THE CARABINIERS JUMPING REMOUNTS.

Nevertheless, the training of the horse-soldier in the United States regular army is just as careful and thorough as it is in any other army. The great training schools, however, of these cavalrymen have been found in the Indian wars. Their work there was rough-riding in the very truest sense of the word, and nowhere perhaps, even on the plains of Arabia themselves, could man and horse be found more perfectly joined as a fighting unit than on those wild battle-grounds on which the white and red man fought their last fights for the lordship of that magnificent territory which was once the red man's happy hunting ground.

At the same time, it must be remembered that, though the British system of training is not so mathematically exact as the Continental system, it loses nothing of its thoroughness through being a little free and easy. Everything that the Continental horse-soldier can do the British cavalryman can do, except perhaps box with his feet. Man for man, and horse for horse, the unit of the British cavalry regiment is better than the unit of the Continental regiment. And it is quite safe to conclude that the British horse-soldier has not in any way deteriorated since the day when the great NAPOLEON said that, with ten regiments of him, he would ride through all the armies of Europe.—*Pearson's Magazine*, April, 1899.

## BOOK NOTICES AND EXCHANGES.

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JOURNAL OF THE ROYAL UNITED SERVICE INSTITUTION. March,  
April, May, June.

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JOURNAL OF THE UNITED STATES ARTILLERY. March, April, May,  
June, July.

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JOURNAL OF THE UNITED SERVICE INSTITUTION OF INDIA. February,  
March.

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PROCEEDINGS OF THE ROYAL ARTILLERY INSTITUTION. May, June,  
July.

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PROCEEDINGS OF THE UNITED STATES NAVAL INSTITUTE. March.

---

REVUE DU CERCLE MILITAIRE. June, July, August.

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UNITED SERVICE MAGAZINE. June, July, August.

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MILITAR WOCHENBLATT. June, July, August.

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REVUE DE CAVALERIE. June, July, August.

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THE PENNSYLVANIA MAGAZINE. May, June.

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RIDER AND DRIVER. June, July, August.

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MEDICAL RECORD. June, July, August.

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MARINE REVIEW. June, July, August.

---

OUR DUMB ANIMALS. June, July.

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MAITLAND DAILY MERCURY.

## THE UNITED STATES CAVALRY.

FIRST CAVALRY—COLONEL ABRAHAM K. ARNOLD, Brig. Gen. U. S. V.  
Adjutant, Lieut. G. T. LANGHORNE. Quartermaster, Lieut. W. C. RIVERS.

HEADQUARTERS, FORT ROBINSON, NEB.

*Troops*—A, B, C and L, Fort Robinson, Neb.; G, H, I and M, Fort Meade, S. D.; K, Fort Niobrara, Neb.; E, Fort Washakie, Wyo.; D, Fort Yates, N. D.; E, Fort Keogh, Mont.

SECOND CAVALRY—COLONEL HENRY T. NOYES.

Adjutant, Capt. F. W. SIBLEY. Quartermaster, Capt. C. B. HOPPIN.

HEADQUARTERS, CIENFUEGOS, CUBA.

*Troops*—B, E, H, I, K and L, Cienfuegos, Cuba; A, C, D, F, G and M, Mantanzas, Cuba.

THIRD CAVALRY—COLONEL S. B. M. YOUNG, Major-Gen. U. S. V.

Adjutant, Capt. H. L. RIPLEY. Quartermaster, Capt. JOHN W. HEARD.

HEADQUARTERS, FORT ETHAN ALLEN, VT.

*Troops*—C, E, F, G, I and K, Fort Ethan Allen, Vt.; A, D, H and M, Augusta, Ga.; Band L, Fort Sheridan, Ill.

FOURTH CAVALRY—COLONEL CHARLES E. COMPTON.

Adjutant, Capt. J. B. ERWIN. Quartermaster, Lieut. T. H. SLAVENS.

HEADQUARTERS, PRESIDIO, SAN FRANCISCO, CAL.

*Troops*—B and M, Presidio, San Francisco, Cal.; A, Fort Walla Walla, Wash.; C, E, G, I, K and L, Manila; D and H, Fort Yellowstone, Wyo.; F, Boise Barracks, Idaho.

FIFTH CAVALRY—COLONEL L. H. CARPENTER, Brig.-Gen. U. S. V.

Adjutant, Lieut. J. M. JENKINS. Quartermaster, ———.

HEADQUARTERS, MAYAGUEZ, PORTO RICO.

*Troops*—Band and D, Mayaguez, Porto Rico; A, Camuy, Porto Rico; B, Utuado, Porto Rico; E, San German, Porto Rico; G, Caguas, Porto Rico; K, Ciales, Porto Rico; C, F, H, L and M, San Juan, Porto Rico; I, Ponce, Porto Rico.

SIXTH CAVALRY—COLONEL S. S. SUMNER.

Adjutant, Capt. M. F. STEELE. Quartermaster, Capt. W. W. FORSYTH.

HEADQUARTERS, FORT RILEY, KANSAS.

*Troops*—A, E, G and H, Fort Riley, Kan.; B, C, F and K, Fort Leavenworth, Kan.; I and L, Fort Sill, O. T.; D and M, Fort Reno, O. T.

SEVENTH CAVALRY—COLONEL THEODORE A. BALDWIN.

Adjutant, Lieut. W. A. HOLBROOK. Quartermaster, Lieut. W. H. HART.

HEADQUARTERS, HAVANA.

*Troops*—A, B, D, F, H, K, L and M, Havana; C, E, G and I, Pinar del Rio, Cuba.

EIGHTH CAVALRY—COLONEL ADNA R. CHAFFEE.

Adjutant, ———. Quartermaster, ———.

HEADQUARTERS, PUERTO PRINCIPE, CUBA.

*Troops*—A, B, G, and M, Puerto Principe, Cuba; D, E, F, H, K and L, Nuevitas, Cuba; C and I, Las Minas, Cuba.

NINTH CAVALRY—COLONEL T. MCGREGOR.

Adjutant, Lieut. J. A. RYAN. Quartermaster, ———.

HEADQUARTERS, FORT GRANT, ARIZONA.

*Troops*—A, B, D and M, Fort Grant, Ariz.; C and I, Fort DuChesne, Utah; E and G, Fort Apache, Ariz.; F, K and L, Fort Huachuca, Ariz.; H, Fort Wingate, N. M.

TENTH CAVALRY—COLONEL S. M. WHITSIDE.

Adjutant, Capt. P. E. TRIPPE. Quartermaster, Capt. S. D. FREEMAN.

HEADQUARTERS, FORT SAM HOUSTON, TEXAS.

*Troops*—Band and A, G, H and L, Fort Sam Houston, Tex.; C, D and M, Fort Clark, Tex.; E, Fort McIntosh, Tex.; F, Camp Eagle Pass, Tex.; I, Fort Bliss, Tex.; K, Fort Brown Tex.; B, Fort Ringgold, Tex.

## CAVALRY OF THE NATIONAL GUARD.

NOTE.—The following have no mounted troops: Alaska, Arizona, Connecticut, Delaware, District of Columbia, Florida, Idaho, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maine, Maryland, Michigan, Minnesota, Missouri, Nevada, North Carolina, South Dakota, West Virginia, Vermont, Wyoming.

### ALABAMA.

FIRST CAVALRY SQUADRON—MAJOR JAMES T. BECK.

Adjutant, Captain A. G. Forbes.

Quartermaster, Captain J. F. Burns.

HEADQUARTERS, CAMDEN.

Troop "A," Montgomery, (Vacancy); Troop "B," Camden, Captain Stonewall McConico; Troop "C," Selma, Captain V. P. Atkins; Troop "D," Birmingham, Captain J. B. Morson.

### ARKANSAS.

Troop "A," Panola, Major M. C. House; Troop "B," Jacksonville, Captain S. W. Murtishaw.

### CALIFORNIA.

Troop "A," San Francisco, Captain Marius Burnett; Troop "B," Sacramento, Captain John Cooke; Troop "C," Salinas, Captain Michael J. Burke; Troop "D," Los Angeles, Captain Charles H. Howland.

### COLORADO.

FIRST SQUADRON OF CAVALRY—MAJOR JOHN CHASE.

Adjutant and Acting Quartermaster, First Lieutenant A. H. Williams.

HEADQUARTERS, DENVER.

Troop "A," Leadville, Captain C. H. Macnutt; Troop "B," Denver, Captain Wm. G. Wheeler; Troop "C," Denver, Captain James H. Brown.

### GEORGIA.

FIRST REGIMENT OF CAVALRY—COLONEL WILLIAM W. GORDON.

Adjutant, Captain Wm. G. Harrison.

Quartermaster, Captain Albert S. Eichberg.

HEADQUARTERS, SAVANNAH.

FIRST SQUADRON, FIRST REGIMENT—MAJOR PETER W. MELDRIM.

HEADQUARTERS, SAVANNAH.

Troop "B," McIntosh, Captain Willard P. Waite; Troop "E," Johnston Station, Captain Joseph W. Hughes; Troop "G," Darien, Captain Benjamin T. Sinclair; Troop "I," Jesup, Captain Harry W. Whaley.

SECOND SQUADRON, FIRST REGIMENT—MAJOR JAMES J. BREWER.

HEADQUARTERS, OLIVER.

Troop "A," Savannah, Captain Beirne Gordon; Troop "C," Springfield, Captain Daniel G. Morgan; Troop "D," Sylvania, Captain Jesse T. Wade; Troop "H," Waynesboro, Captain William H. Davis.

FIRST BATTALION OF CAVALRY (INDEPENDENT)—MAJOR JOHN M. BARNARD.

Adjutant, First Lieutenant John D. Twiggs. Quartermaster, First Lieutenant Robert Dohme.

HEADQUARTERS, LA GRANGE.

Troop "A," Augusta, Captain Albert J. Twiggs; Troop "B," Atlanta, Captain J. Stapler Dozier; Troop "C," LaGrange, Captain Thomas J. Thornton; Troop "D," Hamilton, First Lieutenant John M. Bruce.

**ILLINOIS.****CAVALRY SQUADRON—MAJOR EDWARD C. YOUNG.**

Adjutant, First Lieut. Alvar L. Bournigne. Quartermaster, First Lieut. Milton J. Foreman.  
HEADQUARTERS, CHICAGO.

Troop "A," Chicago, Captain Paul B. Lino; Troop "B," Bloomington, Captain Will P. Butler; Troop "C," Chicago, Captain Metullus L. C. Funkhouser; Troop "D," Springfield, Captain John S. Hurt.

**MASSACHUSETTS.****FIRST BATTALION OF CAVALRY—MAJOR WILLIAM A. PERRINS.**

Adjutant, First Lieut. Albert E. Carr. Quartermaster, First Lieut. Walter C. Wardwell.  
HEADQUARTERS, BOSTON.

Troop "A," Boston, Captain D. A. Young; Troop "D," Boston, Captain John Perrins, Jr.; Troop "F," (Independent), North Chelmsford, Captain Elisha H. Shaw.

**MISSISSIPPI.****FIRST SQUADRON OF CAVALRY—MAJOR J. H. COOKE.**

Adjutant, First Lieutenant B. B. Hardy. Quartermaster, First Lieutenant D. A. Outlaw.  
HEADQUARTERS, ARTESIA.

Troop "A," Crawford, Captain J. J. Prowell; Troop "B," Sessumsville, Captain A. F. Young.

**MONTANA.**

Troop "A," Billings, Captain J. C. Bond; Troop "B," Bozeman, Captain J. F. Keown.

**NEBRASKA.**

Troop "A," Milford, Captain Jacob H. Culver.

**NEW HAMPSHIRE.**

Troop "A," Peterborough, Captain Charles B. Davis.

**NEW JERSEY.**

First Troop, Newark, Captain Frederick Frelinghuysen; Second Troop, Red Bank, Captain John V. Allstrom.

**NEW MEXICO.****FIRST BATTALION OF CAVALRY—MAJOR FRITZ MULLER.**

Adjutant, First Lieut. Sherrard Coleman. Quartermaster, First Lieut. Leon Hertzog.  
HEADQUARTERS, SANTA FE.

Troop "C," Aztec, Captain Lawrence Welsh; Troop "E," Santa Fe, Captain W. E. Griffin; Troop "F," Los Lunas, Captain Maxamiliano Luna.

**NEW YORK.****SQUADRON "A"—MAJOR OLIVER B. BRIDGMAN.**

Adjutant, First Lieut. S. Rowe Bradley, Jr. Quartermaster, First Lieut. Louis V. O'Donohue.  
HEADQUARTERS, NEW YORK CITY. (Armory, Madison Avenue, 94th and 95th Streets.)

First Troop, New York City, Captain William C. Cammann; Second Troop, New York City, Captain Howard G. Badgley; Third Troop, New York City, Captain Latham G. Reed; Troop "C," (Independent), Brooklyn, Captain Bertram T. Clayton.

**OHIO.**

Troop "A," Cleveland, Captain Russell E. Burdick.

**OREGON.**

Troop "B," Gresham, Captain Charles Cleveland.

NOTE.—Another troop, to be called Troop "A," will soon be organized, and a squadron organization will be completed.

**PENNSYLVANIA.**

Philadelphia City Troop, Philadelphia, Captain John C. Groome; Governor's Troop, Harrisburg, Captain Frederick M. Ott; Sheridan Troop, Tyrone, Captain C. S. W. Jones.

**RHODE ISLAND.****FIRST SQUADRON OF CAVALRY—MAJOR GEORGE S. TINGLEY.**

Adjutant, First Lieut. Leo F. Nadeare. Quartermaster, First Lieut. Lucius H. Newell.  
HEADQUARTERS, PAWTUCKET.

Troop "A," Pawtucket, Captain Edward T. Jones; Troop "B," Providence, Captain Wm. A. Maynard.

## SOUTH CAROLINA.

FIRST BRIGADE OF CAVALRY—BRIGADIER-GENERAL JOSEPH L. STOPPELBEIN.

Adjutant-General, Major T. G. Disher.

Brigade Quartermaster, Major E. H. Sweeney.

HEADQUARTERS, SUMMERVILLE.

FIRST REGIMENT OF CAVALRY—COLONEL W. J. CAUSEY.

Adjutant, Captain A. R. Speaks.

Quartermaster, Captain T. E. Ulmer.

HEADQUARTERS, HAMPTON.

Troop "A," Brunson's, Captain R. A. Brunson; Troop "B," Varnville, Captain W. M. Steinmeyer; Troop "C," Brunson's, Captain G. M. Bowers; Troop "D," Stafford's, Captain R. M. Daley; Troop "E," Stafford's, Captain K. S. Long; Troop "F," Peeples, Captain H. E. Peeples; Troop "G," Gillisonville, Captain J. E. Robinson; Troop "H," O'Katie, Captain W. N. Barnes; Troop "I," White Hall, Captain S. A. Marvin.

SECOND REGIMENT OF CAVALRY—COLONEL G. P. ALLEN.

Adjutant, Captain R. C. Roberts.

Quartermaster, Captain W. A. Collett.

HEADQUARTERS, ALLENDALE.

Troop "A," Barnwell, Captain J. A. Hays; Troop "B," Dunbarton, Captain P. M. Carter; Troop "C," Allendale, Captain A. W. Owens; Troop "D," Edgefield, Captain L. R. Brunson; Troop "E," Edgefield, Captain J. R. Blocker; Troop "F," Orangeburg, Captain J. A. Riley; Troop "G," Cedar Grove, Captain R. T. Newman; Troop "H," Hamburg, Captain J. P. De-laughter.

THIRD REGIMENT OF CAVALRY—COLONEL J. R. SPARKMAN.

Adjutant, Captain H. L. Smith.

Quartermaster, Captain W. C. White.

HEADQUARTERS, GEORGETOWN.

Troop "A," Bonneau's, Captain J. A. Harvey; Troop "B," St. Stephens, Captain E. T. Guerry; Troop "C," Georgetown, Captain H. T. McDonald; Troop "D," Jedburg, Captain C. H. Wilson; Troop "E," Conway, Captain L. D. Long; Troop "F," Lake City, Captain J. J. Morris; Troop "G," Georgetown, Captain J. H. Detyens.

SECOND BATTALION OF CAVALRY—LIEUT.-COLONEL D. W. BRAILSFORD.

Adjutant, (Unknown.)

Quartermaster, (Unknown.)

HEADQUARTERS, PANOLA.

Troop "A," Eutawville, Captain Jeff D. Wiggins; Troop "B," Panola, Captain R. C. Richardson; Troop "C," Silver, Captain J. H. Dingle; Troop "D," Holly Hill, Captain R. F. Way, Jr.

## NORTH DAKOTA.

Troop "A," Dunseith, Captain George W. Tooke.

## UTAH.

Troop "A," Salt Lake City, Captain Joseph E. Caine.

## TENNESSEE.

Cavalry Troop, Nashville, Captain George F. Hagar.

## TEXAS

FIRST CAVALRY REGIMENT—COLONEL J. R. WATIES.

Adjutant, First Lieut. James M. Burroughs.

Quartermaster, First Lieut. Frederick Rhodes.

HEADQUARTERS, HOUSTON.

Troop "A," Austin, Captain L. R. Younger; Troop "B," Houston, Captain C. Towles; Troop "E," Dallas, Captain F. V. Rlythe; Troop "F," Denison, Captain E. A. Hammond; Troop "H," Gainesville, Captain H. S. Tefler.

## VIRGINIA.

Troop "A," Richmond, Captain E. J. Euker; Troop "B," Surry, Captain Geo. A. Savedge.

## WASHINGTON.

Troop "A," North Yakima, Captain Marshall S. Scudder; Troop "B," Tacoma, Captain Everett G. Griggs.

## WISCONSIN.

Troop "A," Milwaukee, Captain William J. Grant.